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NOVEMBER, 1860.

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THE FARMER AND PLANTER



PRICE, \$1 A YEAR, ALWAYS IN ADVANCE.

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THE STATE FAIR.

As many inquiries have been made of us, concerning the preparations in this City, for the accommodation of visitors to the Fair, to be held on the 13th, 14th, 15th and 16th of this month, we would state that our citizens have made every arrangement necessary, and none need fear that they will find comfortable quarters.

Let all our people turn out to the *greal State Festival*, and we will show them that South Carolina alone has within her borders the energy, genius, enterprise and intelligenee, suffieient to make her citizens independent of any people or seetion of the world.

From what we can learn, the next Fair will be entitled to the high distinction of being called the INDUSTRIAL EXHIBITION OF THE SOUTH.

OUR PREMIUMS.

The following persons are entitled to the Premiums we offered in the spring, for subscriptions, which will be paid during the Fair week:

	Sub's.	Prem.		Sub's.	Prem.
J. B. Willis, Clio.....	106.	\$50.00	A. White, Jr., Sumter,		
W. K. Easley, Greenville.....	39.	12.00	K. G. Billings, Laneaster,	}	
J. L. Jennings, Rowe's Pump.....	15.	5.00		tie	23. \$8.00

It will be seen that no one has secured the \$25 Premium. There were 22 competitors, and as there were only 5 Premiums offered, the highest lists were successful. We have not room to publish each list, but if there is any error in the above we will correct it.

FOR SALE.

SOUTH-DOWN Sheep, AYRSHIRE Cattle, BRAHMIN Cattle; Chester County, and other breeds of Pigs, all very superior. Also, several varieties of Wheat for seed, viz: White Mediterranean, Red Mediterranean, early, bearded, English Rough Chaff, Soule, White, and Gale, all, except the last, new kinds. Price \$2 00 per bushel.

Huv ing disposed of my Farm and farming interest, for a term of years, to Messrs. Crawford & Nelson, I refer persons who may wish to buy to those gentlemen.

23. 11. Oct. 1747. 1860.

AGRICULTURAL IMPLEMENTS.

ALL kinds of Cast Iron and Steel Plows, Western Cotton Sweeps and Cotton Scrapers, River's Patent Cane-grass Exterminators, Maxwell's Patent Rice Trenchers, to make 3 and 4 trenches, Patent Clod Crushers, for Rice Land.

A great variety of Corn Shellers and Straw Cutters, Horse Hoes, Cultivators, Cotton Harrows, and new agricultural implements. For sale low by

For sale now by
GRAVELEY & PRINGLE,
44 East Bay, Charleston.

Nov. 1860

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VOL. XI.

NOVEMBER, 1860.

NO. 11.

R. M. STOKES, }
PROPRIETOR.

COLUMBIA, S. C.

{ NEW SERIES
VOL. 2, NO. 11

From the Country Gentleman.

AGRICULTURAL CHEMISTRY.

BY PROF. S. W. JOHNSON.

ITS DEFINITION—THE ELEMENTS AND
THEIR COMBINATIONS.

Agricultural Chemistry is properly the study of the chemical relations of all substances which are concerned in agricultural production. It is intimately connected with technical chemistry, to which belongs the conversion of raw natural products into manufactured articles. The whole natural science of vegetable and animal production is usually called agricultural chemistry, although it includes much of physics, meteorology, vegetable and animal physiology, and geology. It is, in fact, impossible to separate these naturally associated subjects, without falling into the gravest error; and hence those late works which give the justest view of the chemistry of agriculture, are not strictly treatises on agricultural chemistry. In all time philosophic minds have been attracted by the mysteries of vegetation, and have sought to explain them; but it is only since the beginning of the present century, since all the physical sciences have been so wonderfully developed, that it has been possible to form any adequate notion of what is involved in the processes of vegetable nutrition. The object of agriculture is to develop from the soil as large a quantity as possible of useful vegetable products; or indirectly, of animal products. To assist in this, agricultural chemistry must inquire, in the first place, into the composition of the plant, and animal. It finds, accordingly, that all vegetable and animal substances contain a variable, usually large proportion of water, which is essential to their living existence, but may be separated from them by a moderate heat, without otherwise affecting their chemical composition. At a high temperature, dry animal or vegetable tissues are resolved into two portions, one of which passes into the air as volatile gases or vapors; and another which is indestructible by heat, and remains be-

hind as ashes. In most vegetable and animal substances, the combustible, or, as it is often called, organic part, forms 90 to 99 per cent. of the whole dry matter; the proportion of inorganic substance (ash) being relatively small. The organic matter, so called from its organic structure, mainly consists of four ultimate elements, viz: carbon, oxygen, hydrogen, and nitrogen. These simple bodies are united together in the plant and animal, into thousands of combinations, the extended study of which belongs to organic chemistry. Most agricultural products, however, consist chiefly of but a few of these combinations or proximate elements. These may be specified under four classes. 1. The oils and resin, including wax. 2. Cellulose (cell-tissue, woody-fibre); starch; the sugars, cane and grape; the gums, arabine bassorine, dextrine (starch-gums). 3. Pectose (the pulp of green fruits,) and its, derivatives. 4. The nitrogenous or sanguigenous* principles; albumen, casein (legumin, avenia, emulsin) and fibrin (gluten). The first three groups are composed exclusively of carbon, hydrogen and oxygen, (some of the oils of carbon and hydrogen only,) while all the members of the fourth group contain 15 to 18 per cent. of nitrogen, most of them small quantities of sulphur, and phosphorous also, in addition to the three elements above named.—One of the most important facts in the chemical history of these bodies, which are the ground-work of all vegetable and animal tissues, is, that the various members of each group are capable of easy transformation into the other members. Many of these transformations we know to take place in nature. We know that the bee has the power to convert sugar into wax; that domestic animals convert starch, cellulose and sugar, into fat; that, in general, carnivorous animals convert all the nitrogenous principles we have mentioned, first into the albumen and fibrin of their blood, and thence into all their various solid nitrogenous tissues. Many of these changes we can produce artificially. Thus

* Blood-producing; so called from the functions of these bodies in animal nutrition.

cellulose (saw-dust) may be made to pass into dextrine, and finally into grape-sugar, by simple boiling with a dilute acid. Starch more readily undergoes the same transformations. Fibrin, exposed to the air a few days in warm weather, is converted into a liquid, which, on heating, yields coagulated albumen, and what has not been affected by heat, yields another coagulum with acid, having the characters of casin. This readiness of transformation is doubtless connected with their similarity or identity of composition, and serves to explain many interesting changes that occur within plants and animals, and to throw especial light on the nutrition of the latter.

STRUCTURE AND PHYSIOLOGY OF THE PLANT.

The continuation of our subject requires a glance at the structure and physiology of the plant. All the innumerable vegetable forms are but aggregations of one simple structure—the vegetable cell.—In its most elementary condition, it is a microscopic vesicle or bag of cellulose, lined with a membrane of nitrogenous matter (albumen, &c.), and filled with a liquid. By change of form, increase of number, elaboration or secretion of other substances in these cells, all the types of vegetable organism are produced. Elongated cells, which become choked with woody matter, form the trunks of trees; cells filled with starch, constitute the bulk of the potato tuber; cells containing scarcely anything but vegetable casin, make up the seeds of the leguminous plants. &c. The vegetable cell possesses the power of indefinite multiplication, and the new cells as they form, are modified into the most various organs, according to external circumstances, or according to the inherent direction which they have towards the function they are destined to fulfil. The aggregate of cells which is called a plant, has roots which penetrate the soil, and stems and leaves which are spread in the air. Both roots and foliage expose a large surface to the medium they exist in. The whole growing part of the plant is a highly porous substance, as easily penetrable by air as a sieve, and a highly hygroscopic substance, absorbing and retaining the vapor of water from the air or soil with great force and obstinacy. When a vegetable is destroyed by burning, it is mostly resolved into air. On the other hand, when it is formed by growth, its substance is mostly derived from air.

WHAT IT DERIVES FROM THE ATMOSPHERE.

The atmosphere which perpetually bathes and penetrates the leaves of plants, supplies them with carbon, hydrogen, nitrogen, and oxygen. The atmospheric source of carbon is carbonic acid. This gas is a constant ingredient of the atmosphere to the extent of 1.2500 of the volume of the latter. It is rapidly absorbed by the leaves of growing plants, under the influence of sun-light, and undergoes decomposition in the vegetable cells, carbon being retained and assimilated, while the oxygen is set free, wholly or in part, and exhales from the leaves.—Water, which always exists in the atmosphere in the state of vapor, is an abundant source of both oxygen and hydrogen. Ammonia, a compound of hydrogen and nitrogen, is the chief source of nitro-

gen to the plant. It is ever present in the atmosphere in the form of carbonate, though in exceedingly small quantity. Nitric acid, which is formed by the oxydation of ammonia, is equally a source of nitrogen. The plant being fixed and at rest, its food must necessarily be in perpetual motion around the organs destined to take it up. The atmospheric food is kept in motion, not only by the winds which are perpetually intermingling the air of all parts of the globe, but more effectually by a silent, yet ever active agency—the osmotic force (exosmose and endosmose). When two or more gases of unequal density are brought in contact, in a confined space, they will gradually diffuse into each other, until they form a homogenous mixture. If, into a mixture of gases, any solid or liquid body be introduced, which can combine with and remove one of the gases, it first takes up those particles of this gas which are in its immediate vicinity, but as fast as the uniformity of the mixture is thus disturbed, the absorbable gas diffuses into the space which has become void of it; and as new parts are removed, new ones are presented, until the whole is absorbed. It is a fact, that all the forms of plant food are soluble in water. In virtue of these physical laws, it is plain that the tissues of a growing plant must be constantly surrounded with water, and with carbonic acid and ammonia dissolved in this water; and as these are removed by the assimilating processes of the vegetable, they are restored by osmotic diffusion, so long as the atmospheric supply suffices.

WHAT IT DERIVES FROM THE SOIL.

The ash of agricultural plants consists of the phosphates, sulphates, silicates, and carbonates of potash, soda, lime, and magnesia, with small quantities of oxide of iron and manganese, and alkaline chlorides. Other bodies, as alumina, copper, and zinc, are found in some kinds of land plants. The living plant contains sulphur (and perhaps phosphorous) in a state of organic combination, in the various nitrogenous principles, or in sulphurized oils. On burning these compounds, sulphuric and phosphoric acid result. A share of the potash, soda, lime, and magnesia, are combined with vegetable acid (oxalic, tartaric, malic), in the living plants, but these compounds are converted into carbonates by burning. Silica exists, probably in the uncombined states in many cases, as in the bamboo (tabasheer), stalks of grasses, and scouring rush; but in burning, it combines with potash, lime, &c., so that it is found as a silicate in the ash. That these ingredients of the ash are indispensable to the development of vegetation, is proved not only by their invariable occurrence in normally developed plants, but by direct synthetical experiments. The cereal grains, for example, will not mature in a soil which is deficient in any one of the following substances, viz: potash, soda, lime, magnesia, oxide of iron, oxide of manganese, silica, sulphuric acid, phosphoric acid, chlorine. These kinds of plant-food are all derived from the soil, and enter the plant through its roots. The medium of their transmission into the vegetable organism is *water*, which is assisted in its solvent action by carbonic acid and ammonia. The same law of osmotic diffusion, which accumulates the gaseous food of the plant in the tissues of

the leaves, keeps up a constant supply of food from the soil. Evaporation from the surface of the plant (foliage and stems) constantly removes from the plant a portion of the water which the cells contain. Capillary action restores the waste of water, bringing up from the soil beneath a fresh supply, which always contains mineral matters in solution. The vague ideas of the older vegetable physiologists, according to which there is a constant circulation of sap in plants—an upward and downward flow—the sap ascending in the outer wood to the leaves, there being elaborated, and returning through the inner bark to the roots, depositing new matter on its way, must be noticed here, as an exploded, but still oft-repeated error. There is no evidence that there exists any but an upward and outward current—a current toward the vaporizing surfaces. The periodical accumulation of sap in leafless trees, is an entirely different phenomenon from the usual upward flow which goes on in foliated plants. Probably there is no current of sap upward from the soil, in the absence of leaves, but a formation of liquid water, and carbonic acid gas within the cells of the tree, arising from certain chemical transformations not yet much studied. The gas accumulates in the cells to such an extent, that when an incision is made, whereby the pressure is relieved in one direction, the expansion of the elastic and confined air forces out the sap before it, just as a ball is driven from an air-gun. The amount of ash and the proportion of its ingredients is different in different classes of plants, and in the various parts of the same plant. As a general rule, the exterior or terminal parts of plants, as the bark, leaves, and chaff or fruit envelopes, give the most ash, 7 to 28 per cent.; while the wood of trees is poorest, yielding but 2-10 to 3 per cent. The same organ contains different quantities of mineral matters at different stages of its growth. Doubtless, part of the substances which we find in the ash of a mature plant, have finished their active functions, and have been secreted as waste matters. Doubtless, too, a part of the ash is accidental, not being necessary to, or employed by the plant, but having entered the vegetable circulation merely from being dissolved in the water, which the plant has absorbed. For these reasons, we find that there is often little agreement between the numerous analyses which have been executed on the ashes of the same species or even variety of plant, its composition being to a certain extent influenced by the kind of soil in which it grows. Yet there is a general uniformity of composition, and it is undoubtedly true that the organization of the elements, carbon, hydrogen, oxygen and nitrogen, into the cell-tissues and their contents, requires the co-operation of the ingredients of the ash, and that the relation between them is quantitative and definite, though, from the complexity of the plant, and from the accidents before alluded to, we may never be able to determine it accurately.

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A CURE FOR THE BOTS.—Many a fine horse is lost by bots. Take tartar emetic one teaspoonful, and add one pint water; drench the horse; it will not puke, but the system will relax, and the bots will yield; give aloes to discharge the bots.

From the Darlington Flag.

REPORT OF THE COMMITTEE ON COTTON,

*Read before the Darlington Agricultural Society,
at its last meeting.*

The cultivation of our great staple affords food for much thought and reflection to us, both as a people and as individuals.

The immense amount of capital engaged in its cultivation, the profits derived from it, its adaptability to our climate and domestic institutions, the blessings it confers upon the world, both as clothing and food, nay, our very existence as a people, dependent upon its culture, are, or should be, sufficient inducements to us to strain every nerve to promote its successful cultivation.

The trite and true apothegm that "he who makes two blades of grass grow," &c., is no less true of cotton. Although all flesh is grass, yet flesh in these days requires clothing as well as food, and next to cheap food, cheap clothing absorbs the thoughts and energies of the civilized world.

Your Committee, willing to contribute their mite to this important object, propose to lay before the Society, in a few plain words, their views on the preparation of the soil—for manuring, cultivating, picking, ginning, baling and selling this production of our land.

We would premise by saying that cotton is a tropical plant, exotic in our climate, and, like all exotics, requiring constant care and attention in its cultivation. Although it will grow, and make something under the shameful treatment it now receives, yet it amply repays all extra care and labor that can be bestowed upon it. Thorough preparation of the soil is therefore absolutely necessary to its full development. Plowing is the best and cheapest mode of preparing our land, yet great benefit is often derived from the after use of the hoe, in the thorough disintegration of the soil, and in putting it in a fit state to receive the seed. In our stiff clay river lands, this mode of preparation is absolutely necessary, to make anything at all.

The land should be laid off in rows of a width corresponding to the fertility of the soil, and plowed deeply and thoroughly into beds, with a turning-plow. The beds should be as high as the plow can make them, for it is eminently a sun and dry weather plant, and therefore should be placed as high as possible out of the reach of water and cold; the bottom lands, or flats, should be drawn up with the hoe, and the clods broken and pulverized. This should be done as early in the season as our other farm operations will admit of. Just before planting, if we can spare the time, two furrows with a turning-plow should be run on the top of the bed to freshen up the land, and give the cotton a fair start with the grass and weeds. If we have not time for that, running a horse rake over the beds before the drill will answer the same purpose on our stiff lands, and on the lighter pine lands a heavy drill and rake, or block, will leave a clean bed.

Before the preparation of the land, our manures should be applied. They should in all cases be put in the drill. The small quantity of manures we can make, the difficulty of their application, and the fear of losing some of their volatile and valuable in-

gredients, precludes broadcasting manures with us. In the drill they can be more easily applied, more deeply covered, and all loss from evaporation guarded against. All kinds of manures are beneficial to cotton—stable manure, cotton seed, guano, cow-pen manure, serapings from the woods, salt, lime, ashes, charcoal, and the numberless compounds with which we are deluded by our Northern brethren—all add something to the natural fertility of the soil, and show an increased production of cotton. Whether all pay for the expense of their application, is a mooted question, and one to be determined only by the experience of each one of us.

The land being thoroughly prepared, the next process is planting the seed. This is usually done by running a drill-plow on the top of the bed, strewing the seed with the hand, and covering with a horse rake or block. The various machines that have been recently invented to facilitate this, your Committee have no experience in the use of, and therefore cannot pass judgment upon them; but we would say, that if they can be made to answer the purpose, they will pay for their cost the first year, in saving the immense quantity of seed that is now wasted in planting with the hands.

The cotton being up, the next process is to plow it and chop it to a stand. The plowing is done either by barring it down with a cutter plow, or plowing it with a shaver or sweep. The judgment of your Committee is in favor of the sweep. It covers and destroys the grass in the baulk as effectually, does not cut the roots of the cotton, does not throw down the beds so much, leaves a wider ridge for the hoes to chop through, and, consequently, the cotton is not so much thrown down in that operation, and so liable to sore shin and injury from the hoe.

We would earnestly recommend that the cutter plow should be used only in the preparation of the land, and not in the cultivation of the crop—deep and thorough preparation, high manuring and shallow culture, are the great secrets of the successful cultivation of the cotton crop. Cotton should be thoroughly cultivated, and hence we should not plant more of cotton and corn than we can work over every two weeks. Over-planting is the curse of our country—it is ruinous to our lands, to our labor, to our immediate pecuniary interests, as well as to the future prosperity of our children and country; it has done more to depopulate our country than all other causes combined. Our duty to our country, ourselves, and last, but not least, our slaves, requires that there should be some change in this respect.

The crop when *ripe* should be picked out as rapidly as possible, and at the same time free from dust and trash. To facilitate this, I know of nothing better than a system of reward for extra picking—25 cents will pick five times as much cotton as 25 lashes. If every planter would discontinue the practice of allowing his negroes to plant a crop for themselves, and instead thereof pay them in money, at Christmas, for extra picking, we would get our crop out in better time, better order, and with more satisfaction to ourselves, whilst we would avoid much of the punishment of our negroes, which is disagreeable to us and injurious to them, and prevents

in a great measure, that fruitful source of all crimes with them—the constant traffic with every grog-shop in the country.

The cotton should be picked in a sack strung around the shoulder of the picker, and emptied repeatedly during the day into sheets and spread out in the sun to dry; it should be weighed twice a day, and hauled in a wagon or cart to the gin-house. The picker should not be expected to do more than help lift the sheet into the wagon. The sheets should be examined constantly during the day, and when emptied, to see that there is no dirt, trash or other foreign matter in them. All attempts on the part of the hands to cheat in picking, by putting dirt, stones, &c., in their sheets, should be promptly punished (forfeiture of the money gained is a very effectual punishment). Permit us to recommend to the Society, the use of cotton sheets instead of baskets—four yards of osnaburgs will make a sheet that will hold 150 lbs, and will last two years, with care four years. In addition to the consumption of cotton, which we all desire, the advantages of the use of them are, that the cotton picked out in the early morning can be spread out to dry, and the dew all evaporated from it before it is hauled into the gin-house. All trash or dirt in the cotton can be seen with a very slight examination, and three times as much cotton can be hauled in a cart or wagon with sheets, as can be hauled in baskets.

The sheets should be numbered, and a similar number attached to each hand's name on the cotton book, so that its owner can be told at a glance.

As soon as sufficient cotton is picked out the gin should be started—the gin-house, lint-room and gin having been previously overhauled and thoroughly cleaned. The gin should be of the best quality, and in good order, and should be repeatedly examined by the owner or overseer, to see that it is kept in order. The gin-house and lint-room should be kept open as much as possible, to give the brush wheel drift, and the cotton should be packed out every two or three days.

I made an experiment in packing last fall, and found that two hands could pack six bales of cotton in a day with more ease than six could pack twelve, whilst at the same time the lint-room could be kept open, a large quantity of dust and dirt driven out by the trash wheel, the danger of fire was lessened, and the gin could pick one-fifth more.

The seed should be carefully housed, and protected from the weather. The careless practice of throwing them out to be rotted by the rain, and their valuable contents wasted by the sun and air, is a loss to the country of thousands of dollars. Whether for manure, or food for cattle, live seed are worth five per cent. more than rotten ones.

Respectfully submitted,
W. H. EVANS, Ch'n.

LOSS OF THE CUD.

Literally, there can be no such thing as "loss of the cud." Ruminating animals are never furnished with an appendage so ridiculous as a cud, to be used as "gum," in the mouth of a school-boy, which, if lost, must be supplied with an artificial "cud," as if the operations of nature must be suspended until

this prepared artificial panacea is supplied, to take the place of the "cud lost."

By a slight investigation of anatomy and habits of ruminating animals, this very common delusion would be dispelled, and the slight understanding of the "cud," the causes of its "loss," and the means necessary to be used to restore it, would be more clearly understood.

By ruminants, or ruminating animals, we mean those having a complex stomach, with four cavities, so disposed as to allow of ruminating, or the act of at once laying in a large stock of food, slightly chewed, and afterward to return it to the mouth, and there more thoroughly masticate it, and fit it for digestion. Digestion is always preceded by this action in this order of mammals, and they are exclusively confined to a vegetable diet. Now if debility, loss of appetite, disease of the stomach and digestive organs, or sickness from any other cause ensue, this order of nature may for the time be suspended, and the animal have no need to perform the act of rumination. The ordinary operations of a healthy animal are not called into requisition. Hence, we hear of "loss of cud." The only "remedy" for this "loss" lies in restoring the animal to health, and if we know what is the disease, we can the more certainly apply the "remedy." But all the "made cuds" that ever entered into the *materia medica* of quackdom can never compensate for the folly and ignorance of applying one.

The stomach of ruminating animals is especially organized for the performance of its peculiar functions. It consists of four distinct cavities, all communicating with a muscular canal at the termination of the *oesophagus*. Coarsely masticated food passes from the beginning of the muscular canal into the first cavity, called the *rumen* or paunch.—Water is received into the second cavity, called the *reticulum*, and almost exclusively occupies the honey-comb cells of that cavity, and is gradually mixed with the coarsely divided food, which is undergoing mastication in the *rumen*. When this is sufficiently advanced, a portion of the mass is raised into a muscular canal, is there moulded into a ball, and by a spasmodic action of the muscles of the gullet, is forced into the mouth, where it is perfectly masticated at leisure, mixed with saliva, and again swallowed. It now passes directly into the third recess, called the *psalterium*. Here the superfluous fluid is absorbed, and the thoroughly subdivided mass passes gradually into the fourth recess, called the *abomasus*, where it is completely digested, and from which it passes off into the lesser intestines.

Ruminating is a most interesting process of nature, and it is a most pleasing study to observe and note in its manifold operations, and to witness the supreme satisfaction of a well-fed animal "ruminating," or elaborating by this wonderful provision of Providence, the mastication of food by delugation, ejection, and final swallowing, otherwise, "chewing the cud." When we become more thoroughly familiar with the beautiful economy of animated nature, and its most wonderful organization, we shall no more hear of the "loss of the cud," but will attribute the effects to their proper causes, and call things by their right names.—J. V. H. C., in *Genesee Farmer*.

From the American Farmer.
SPAYING COWS.

TRANSLATED FROM THE "JOURNAL D'AGRICULTURE PRATIQUE."

A farmer has recently demanded that there should be a law made to prevent the slaughter of calves.—It would be necessary to demand, at the same time, a law requiring the farmer to produce two, three, or four times the usual amount of forage. The second decree should at once follow the first, for we cannot suppose it would be possible for a farmer to keep or raise a calf when he has not food sufficient for it.

If we consume more of veal in France than in England, it is for the reason that we produce less roots and forage. Now, in interdicting the slaughter of calves, we do not make the least gain in the world. Is it true that at the end of the year there remains a surplus of unconsumed forage? If not, it is not true that consumers are wanting.

This simple argument answers the objections which have been made to the spaying of cows.

"But you diminish the production of meat—you dry up the sources of public aliment."

Do you believe, then, that if we spay cows at the age of eight or ten years, after they have borne three or four calves, the quantity of edible meat will be diminished? It is probable that the number of calves will decrease, that is to say, the number of calves from old cows, and which are killed at six weeks old—animals of bad shape, with skeletons prominent with narrow chests and big bellies, poor consumptive beasts, children often of consumptive mothers.

There will be, perhaps, less veal, but more beef. It is not so much the number of animals killed upon which depends the quantity of edible meat, but the state of the animals as to their more or less perfect fattening. What advantage is there in having a mass of bones covered with muscular fibres containing neither juice or other nutritive qualities?—What we do need is flesh, and good beef flesh, when at least it can be produced by the cow.

Do you not know that among domestic animals the flesh of the female is more tender and succulent than that of the male? To make the cow a better animal than the ox, we have but to do as with the male—to take from them those organs which have become useless, and which, by their powerful influence upon the animal economy, tend to prevent their taking on flesh.

We shall thus slaughter less poor cows and more good ones. There are old worn-out cows killed at fifteen or eighteen years of age, of which the flesh is hard, tough, and with but little nutritive quality, to the detriment of the reputation of the beef of cows. But we are well convinced that the production of meat, in place of being diminished, will augment. Instead of losing nourishment in a bad machine which consumes much and returns nothing, we put roots and forage into an excellent apparatus, which receives little and returns much. A beef animal is a machine to produce flesh, as the field is a machine to produce corn; there are good and bad animals in point of fattening, as there are good and bad fields in point of production.

Consider an unhappy man afflicted with a tape-worm ; he eats like an ogre, and remains as thin as a nail ; nothing profits him. Most old cows have a tape-worm.

But the production of milk ? you will say. Nourishment, given to a spayed cow, produces a double effect. It augments the production of milk at the same time that it predisposes the animal, little by little, to lay on fat ; thus, when the cow does not produce a quantity of milk sufficiently remunerative, she is found presently fatted and all ready for the butcher. A good spayed cow gives, in the first year of milking, four, five, and six thousand litres (quarts) of milk. These figures have been sufficiently established by the most unquestionable authorities.

The flow of milk is as abundant during the year as in the first days, and lasts much longer than with an ordinary cow. It has been estimated that for an ordinary milch cow receiving sufficient aliment, the augmentation of milk may be reckoned at the least at thirteen hundred and fifty litres.

On the other hand, the yield of milk is not only superior with spayed cows, not only is the fattening of these animals quicker, more easy and complete, but the milk will return a third more in butter and cheese, and the flesh is more succulent, tender, and more thoroughly penetrated with fat.

This double phenomenon is easily explained by the youth of the cow, by the distance from calving, by the placidity of the cow disengaged of the troubles caused by the rutting seasons. The digestion is always good, and the animal is always quiet, and all that it consumes goes to its profit.

In proportion, as the time of calving grows distant, the milk becomes more equal and more homogeneous ; it acquires, in a word, more of the quality of that which comes from a cow not spayed when she is in a state of perfect quiet.

But it is often very difficult, if not impossible, to obtain, without spaying, this state of quiet ; above all, when we give much provender to obtain large products. And if we prevent the covering of the cows, what disorders are produced in the milk functions, from the fact that the natural desires are unsatisfied ? How many cows contract then the terrible malady of hysteria or nymphomania ? The number of cows "bull mad" can fairly be estimated at one-tenth, and all these cows are sick animals.

It is easy to render an account of the advantages offered by spaying cows, under the report given of their milking qualities, when we know to what regimen the herdsmen in the vicinity of Paris submit their milch cows, to the end that they may relieve them of those affections which spaying makes completely and suddenly to disappear.

The milch cows of Paris receive abundant and succulent nourishment, but that which debilitates them and renders them lymphatic, and augments the quantity of milk to the detriment of its quality. They are confined permanently to stables, and never allowed to see the light, in order that the rutting season may be delayed as long as possible. They become rapidly consumptive, and produce poor milk during their period of lactation, and give, after they are slaughtered, flesh worse than the milk.

With spaying, the necessity of this unwholesome treatment ceases. The herdsman buys good cows,

after their third or fourth calving ; he has them spayed, and puts them on good healthful treatment ; he obtains more and better milk than from his poor and consumptive cows. When the milk diminishes the animal takes on fat, and is sold for a good price and in excellent condition.

These are the different considerations which have determined us, after a long and serious study of all the facts gained by repeated experiments, to put the spaying of cows among the number of operations that is needful to encourage among farmers.

From the Southern Planter.

A VIRGINIAN'S EXPERIENCE IN RESUSCITATING OLD FIELDS.

In 1816, I took possession of a poor, exhausted James River plantation, which had been originally good land, but very much exhausted by bad culture, under the management of ignorant overseers. I found the land in three shifts, *corn, wheat and pasture*, with some indifferent cattle and sheep, and a few hogs, all grazing the third field, so as to make the third shift, and what was called the resting year—the most exhausting part of the system. I was young—not being of age—and just from sea. Of course I knew nothing about farming, but I soon saw that there was a want of system in everything—no regularity of hours, no measuring in and out, no day-book, no journal, no reckoning kept. It was so different from sea service, that I began to fear the ship was in a bad way, and would soon founder, if not at sea, at least on the river. So I began to inquire and read some little about farming, and fortunately met with the Philadelphia Agricultural Memoirs, and my old friend, John G. Mosby, who, by-the-by, is entitled to the credit of introducing the four shift system and clover on lower James River. I soon found that land could be cultivated in other ways than three shifts, and that the whole system was wrong ; and in a year or two, I changed overseer and system both. The first change I made was, to turn out the poorest field, and convert it into a standing pasture for the cattle, sheep, &c., and laid off the other two fields in four shifts or fields, and sowed one each year in clover, and plastered the clover heavily ; the clover and plaster acted finely, and the crops improved rapidly under the milder system of four fields, and a standing pasture for the stock, which allowed all the clover to be turned in, the cattle not grazing the clover for several years, until the land acquired a sufficient quantity of vegetable matter—the very thing it most needed, after so long and scouring a system as it had undergone for many years.

After improving the four fields by clover and plaster for several years, and reaping tolerably good crops, I found that the land became too full of vegetable matter, and required grazing again. I then took up the standing pasture, changed the system into five fields—the standing pasture having very much improved from rest and cow-penning in the meantime. I continued the five field system, with partial grazing, for several years, with tolerable success, until Mr. Edmund Ruskin induced me to try the marl from his farm, in Prince George county, which acted like a charm. I continued the use of marl for several

years, but finding it very laborious to transport, it being across the River, and eight or ten miles off, I commenced using lime; first, by buying oyster shells and burning them in a kiln of wood; and after oyster shells became difficult to procure, I commenced the use of Northern lime, and have continued it ever since, in moderate quantities, liming regularly one shift or field in the rotation each year. The improvement from clover and plaster of Paris alone was considerable, particularly upon the wheat crop; but the land began to get clover sick, and frequently failed to produce good clover, and of course the wheat crop suffered, for they go together; but after marling and liming, the clover rarely failed, and the crops regularly improved, particularly the corn crop, which has doubled since marling and liming were introduced, and both wheat and corn crops have quadrupled since 1816, when the three shift and hard grazing system was abandoned. I attribute whatever success I have achieved to constant and strict attention to my business; to my lands, negroes and overseers; to a systematic habit I acquired at sea, of keeping regular account of everything on the plantation, (never selling, feeding, or using a grain of anything not measured and entered in my books, and I can tell by referring to them for 40 years back, every bushel of corn, oats, &c., consumed yearly on the plantation by negroes, horses, cows, hogs, &c., and every dollar expended for plantation negroes, as well as myself, and each member of my family, &c.,) to adopting an ameliorating system, with frequent grass crops; to the use of plaster, marl and lime; and to constant attention to plantation manure, of which a great deal is made and used. To these, I repeat it, I am indebted for whatever success I have attained, and I would advise others to pursue substantially the same course, especially in husbanding with great care the resources of the farm, for making manure, and to stick to old Virginia, and make her flourish.

I am now about to change my system back to four fields again, believing as I now do, from many years experience, that after you have improved your land to a certain extent (if alluvial or flat land), that the four field system is the best. It certainly will make more wheat, and nearly as much corn to the acre; and as it affords more land in each crop, it will make more produce, and, provided the land improves under it, must be the best system. But the land must be either good or improved, level or alluvial land, to stand the four field system, or it will not answer; and you must use good management in manuring and liming, &c., or it will fail; but, with that, I believe it is the best system. The advantage the four field system has over the five is, that it is a more cleansing system—the hoe crop (corn) coming round more frequently, keeps the land cleaner, which is all-important in any system. The next advantage in the four field system is, that you turn in a clover ley more frequently, which is highly improving, and at its best stages too for fallowing, which is all important; and the third is, that you have more land to cultivate, and, provided you have sufficient labor, your returns will be larger. But you cannot support so much stock, and you will have to substitute straw, in some measure, for manure, by covering the land with it, which, as

it is becoming a prevalent opinion that it is the best mode of using straw, is no objection to the system. Coke's, Lord Leicester's, four field system, so generally adopted in England, is a very similar one, substituting turnips and barley for corn and wheat, and using more manure than we can afford to do. The English system, on heavily manured land, is turnips, barley, clover, wheat—our system is corn, partially manured or limed, or both, wheat, clover and wheat. The corn crop is a more exhausting crop than turnips, but it affords a good deal more offal for manure, and makes up in that way; and as a bread crop for our negro population and teams, is invaluable. But do not understand me as recommending the four field system for any but rich or highly improved, and flat or alluvial land. It will not answer for hilly, or rolling, or weak lands—they should have a more extended and ameliorating system, viz: 5, 6 or 7 fields, according to circumstances as mentioned before, so that the more frequent grass crops will intervene, and prevent washing, or restore the fertility exhausted by grain crops, tobacco, grazing, &c. I have been cultivating under the five field system twenty years, after having previously cultivated twenty years under the four field system, and I now return to the latter system because my land is sufficiently improved, I think, to stand it, and make more profit under it, and perhaps continue, with good management, to improve under it. I think, under good management, on good land, where heavy crops of corn and wheat are made, you may manure an entire field, or fourth part of the land, each year, under the four field system. That is to say, you can cover with the spare straw and the manure of the plantation one-fourth of it annually; and if so, it must be an improving system. The fact is, all land should be manured regularly at intervals; and no system is a good one which does not admit of manuring at least one field in the rotation annually, for, after all, manure is the great mine of agricultural wealth.

The improvement in agriculture in Virginia for the last twenty years, particularly in lower Virginia, has been considerable; and the Agricultural Fairs of the State are entitled to a good deal of the credit; but there is great room for improvement yet, and I have no doubt, if the Fairs continue to be encouraged as heretofore, and our young and enterprising men will only stick to old Virginia, she will flourish and become the first State in the Union, as she once was; and God grant she may be again, is the prayer of your humble servant.

P. S.—I have been informed that there was dissatisfaction expressed at the Central Agricultural Society, when I delivered this address, that I did not enter more into detail about my crops, &c.; and I have been requested to do so, but, as I said before, I think it would be egotistical to talk so much about myself, as it would be necessary to do, if I did that; I will merely say, therefore, that when I took charge of the management of my plantation, the best crops of wheat were about 2,000 bushels, and of corn about 500 barrels; and my best crops of wheat, since I improved the plantation, have been over 8,000 bushels, and of corn over 2,000 barrels—so that I have quadrupled the crops, as I said before.

HILL CARTER.

TREATMENT OF MARES WITH FOAL AND AT FOALING.

The usual period of gestation in the mare is from forty-eight to fifty-two weeks, but she sometimes varies from forty-six to fifty-four weeks. Some writers have asserted that the mare goes with foal eleven months, and as many days as she is years old; others that she goes eleven months with a mare, and twelve months with a horse colt; but there is no dependence to be placed in such rules. In some instances I have known mares to foal horse colts in ten months and two weeks, and in others to go a year and upwards, and yet bring forth mare colts; one year a mare to foal in eleven months, and the succeeding year the same mare to go three weeks longer, and in both cases had fillies. Out of a record of eighty mares kept in one season, the average period of gestation was eleven months and one week; of these there were forty horse colts, and the like number of fillies; the horse colts averaging one day the longest, which was caused by one very old mare going over a year. These facts prove the fallacy of such predictions.

After your mare has been put to the horse of your choice, she should not be confined too closely during her pregnancy. A run to grass for four or five months would be highly advantageous. But if her services are needed either for agricultural or other purposes, she may be kept at moderate work from the time of connection up to the period of foaling, not only without injury but with decided advantage. Moderate exercise is essential to the production of healthy offspring. When half the period of pregnancy has expired, she should be more generously fed, as by this time the foetus will be making greater demands on her for sustenance, and she should, therefore, be allowed one, two, or three feeds of grain a day, according to her condition and amount of labor required to perform. This is also the period when abortion is most likely to occur. The mare is in danger of slinking her foal from foul blows, over-exertion, the use of musty hay or grain, and offensive objects of smell or sight of any kind. Good feeding and careful exercise are the best preventives of this misfortune. The mare should not be let out or exposed to cold winds and storms, and at night she should be placed in a wide stall or loose box, well littered with clean straw, affording her a good bed, which will add much to her thrift and comfort; she should also be curried and rubbed down, if worked, at least once every day.

When the mare is near foaling she should be by herself, either in a small lot or good roomy stable, under the frequent inspection of her owner, or some careful person. The approach of parturition is indicated by the formation of milk in the udder and the filling up of the teats; milk often flowing out a few hours before delivery. She must now be closely watched, as many a fine colt has been lost by being suffocated in the sheet. If the mare has been well taken care of while with foal, and is in good health, but little danger will attend the act of parturition. When all is right she will be delivered in a short time; if, however, there appears to be any great difficulty in producing her foal, a little gentle assistance is sometimes necessary.

This act of labor over, it is necessary to secure the cord by a ligature near the colt's body—the cord may then be severed by a sharp knife. This practice I have never seen recommended, or heard considered necessary, but I am fully satisfied of its importance, as in some cases I have found the cord so strong that disastrous consequences would certainly have attended its violent rupture. It will be better to leave the mare alone for an hour or so, that she may be permitted to perform the natural operation of licking her foal undisturbed, and that it may gather strength sufficient to enable it to rise. When once upon its feet, and having learned to seek, there is but little danger but that both mare and colt will do well.—*American Stock Journal.*

ADVANTAGES OF PULVERIZING THE SOIL.

The effects of pulverizing or stirring the soil are numerous.

1. It gives free scope to the roots of vegetables, and they become more fibrous in a loose than in a hard soil, by which the mouths or pores become more numerous, and such food as is in the soil has a better chance of being sought after and taken up by them.

2. It admits the atmospheric air to the spongiolites of the roots—without which no plant can make a healthy growth.

3. It increases the capillary attraction or sponge-like property of soils, by which their humidity is rendered more uniform; and in a hot season it increases the deposit of dew, and admits it to the roots.

4. It increases the temperature of the soil in the spring, by admitting the warm air and tepid rain.

5. It increases the supply of organic food. The atmosphere contains carbonic acid, ammonia and nitric acid—all most powerful fertilizers and solvents. A loose soil attracts and condenses them. Rain and dew also contain them. And when these fertilizing gases are carried into the soil by rain-water, they are absorbed and retained by the soil for the use of plants. On the other hand, if the soil is hard, the water runs off the surface, and instead of leaving these gases in the soil, carries off some of the best portions of the soil with it. Thus, what might be a benefit becomes an injury.

6. By means of pulverization, a portion of the atmospheric air is buried in the soil, and it is supposed that ammonia and nitric acid are formed by the mutual decomposition of this air and the moisture of the soil, heat also being evolved by the changes.

7. Pulverization of the surface of soils serves to retain the moisture in the subsoil, and to prevent it from being penetrated by heat from a warmer as well as from radiating its heat to a colder atmosphere than itself. These effects are produced by the porosity of the pulverized stratum, which acts as a mulch, especially on heavy soils.

8. Pulverization, also, as the combined effect of several of the preceding causes, accelerates the decomposition of the organic matter in the soil, and the disintegration of the mineral matter; and thus prepares the inert matter of the soil for assimilation by the plants.—*Genesee Farmer.*

THE DAIRY.

Cows should be driven to and from pasture slowly, and as gently as possible. Changing drivers, attendants, or milkers, should be avoided as much as possible, especially a change of milkers should not be permitted except upon the most urgent necessity. It is very desirable that the pasture should be near on a dairy farm; other interests should be made to yield to this most important necessity. If the pasture is far from the place of milking, so as to require a long tedious walk, or deprive the cows of the benefit of night pasture, a very serious difference in the amount of milk and butter will be the result; a difference that would surprise many who had never tried both systems of management. A shed, or stable, with ties or stanchions, is much preferable to milking in the yard, not only as a protection against bad weather, but many cows get an uneasy bad habit of starting and kicking, by being permitted to run about a yard instead of being confined, as is always best. It seems hardly necessary to enjoin the commencement of the utmost cleanliness before the milking has ever commenced; the udders should be well washed time enough before milking, to have them get thoroughly dry. A bad flavor is often imparted to the milk and butter, by allowing the dust and dirt from the udder to drop into the milk while milking, instead of having it washed off before. Milking should be done at stated, regular hours, and at the same hours both morning and evening, so that the intervals between the two milkings may be the same. Let the milk be drawn quickly, and as gently and as quietly as possible, being very careful to leave none in the udder. If these points are all faithfully adhered to, there is no necessity of having cows get the bad habit of requiring to be stripped for a long time after the main quantity of milk is obtained; it is a very tedious habit, and of no possible use, and may be nearly always avoided by better management, when cows are young. Milk quickly and thoroughly, but as soon as the milk is fully drawn from the udder, stop, and do not try to get a little more by long continued stripping, and never go to them the second time, to obtain a few drops that properly belongs to the next milking. I know there is a general impression that as the last drawn milk from the cow is the richest, that it is very important to get the last drop by tedious stripping, and by returning to the cow to strip again, thereby obtaining a small quantity of superior richness; but all these practices certainly tend to form and confirm a bad habit of withholding the milk, on the part of the cow, for these stripplings, and it will as certainly be found that this habit will cause the milk to decrease, and finally dry off, at a much earlier day than where the cow is encouraged to give her milk freely and all at once. I repeat, milk quickly, promptly, and stop as soon as the milk is perfectly drawn; but do not draw on the subsequent milking, by small installments, for a loss instead of a gain will be the final result.

Gentle kindness will usually subdue any inclination to be fractious; but if reasonable time and patience fail, the cow or heifer should not be allowed to become confirmed in a kicking habit. The best

way is to firmly confine or tie the cow, so as to effectually prevent any attempt at kicking being successful. This may generally be effected by tying up one fore-leg, but not always. A strap around both hind-legs will seldom fail, but it should not be continued longer than necessary to accomplish the breaking up of the habit, or the animal will become so accustomed to it as to refuse to be milked without. While being prompt to stop this habit and firm to correct it, let kindness be still the leading feature, so you may be regarded as a governing friend, rather than a tyrannical enemy. I think I may say scolding and beating never accomplish anything, but to make those who have any inclination to become so, confirmed in their viciousness.

For cracked or sore teats, frequent washing with cool water is the best remedy; a slight addition of castile soap may be found cleansing and beneficial, but is the nearest approach to grease that should be used. For inflamed udder, garget water is also best, though in obstinate cases of garget a tea-spoonful of saltpetre, given three mornings in succession, will be found useful, generally removing all such obstructions, and preventing their recurrence. If the first three doses fail, after a week repeat for three more mornings.

Women are usually much better milkers than men, being more gentle and expeditious, and cows seldom like to change for a man, after becoming used to being milked by a woman. No more talking should be allowed than is absolutely necessary at milking time; many cows are prematurely dried off by indulging in this bad, needless habit. If intended for butter making, the sooner it is strained and at rest after milking, the better. The process of cream-rising commences immediately after milking, and if the milk is permitted to stand until this process has commenced, there is a loss not only of the cream that has risen, but in interfering with the process, and a very considerable less cream will be realized than if it is strained and at rest immediately after milking.—*American Stock Journal.*

From the New Orleans Picayune.
LOIS WEEDON SYSTEM OF HUSBANDRY.

The British agricultural periodicals have of late bestowed considerable attention upon the Tullian system of culture, as revived and illustrated in the practice of the Rev. Samuel Smith, of Lois Weedon. As to the complete success thus far attending this revived system, there can be no doubt, the testimony being direct and to the point, and therefore convincing. But, after all, it can be termed nothing more than an improved garden system, for say what Mr. Smith may, from his own very satisfactory experience, it can never be adapted to extensive agricultural operations—for instance, such as we see in the Southern and Western States of the Union. But let it be restricted only to gardening purposes, and it would doubtless prove of great value to almost every community where it is desirable to make two blades of grass grow where one grew before—where the density of population demands every species of vegetation full up to the capacity of the land to produce.

This plan of Mr. Smith, copied from the practice pursued by Tull, some hundred years ago, is simple

and efficacious. For twelve consecutive years he has, without a particle of manure of any kind, grown wheat year after year on half the land, reaping an average product of thirty-five bushels per acre. The method, in a few words, is this: The land having been kept open by the spade to subsoil depth, three rows of wheat are planted or drilled at one foot distance between the rows, thus occupying three feet, the next three feet being left vacant, and in this way alternating throughout the whole field. The intervening fallows are kept well tilled with the spade, and kept free from all weeds and grass during the growth of the crop. So also in regard to the spaces between the rows, using the "horse-shoe"—hoe, we presume. As soon as this crop is gathered, the vacant places are at once planted; and so on, year after year, without any change of crops, application of manure, or cessation in the course.

We must, therefore, conclude, remarks the *British Farmer's Magazine*, that the secret of the success of this system lies in the constant stirring of the soil under fallows, in order to promote the absorption of the elements of fertility; and, moreover, the proportion of that success depends upon the degree and depth to which the soil is stirred and comminuted. On no other principle can a result so contrary to all the hitherto received opinions and practice of agriculturists be accounted for. Every modern writer on agriculture, whether scientific or purely practical, has maintained the necessity of a constant application of manure, in order to compensate the soil for the exhaustion of a cereal crop.

The *Magazine* notes a remarkable corroboration of this opinion, as occurring recently in British culture. A piece of land had been deeply subsoiled, and comminuted with the Norwegian harrow, and planted with potatoes without manure. On each side of it the land was tilled in the common way, and also planted with potatoes. The latter produced one bushel per rod, but the former yielded two and-a-half bushels per rod, being an excess over the other of two hundred and forty bushels per acre. A similar result is obtained by Mr. Smith's spade husbandry over that of the plows, as practiced by seven other experimenters on the Tullian system. Their average produce was twenty-four bushels three pecks (wheat) per acre, whilst Mr. Smith's was forty bushels.

It is worthy of remark that, so far from this system impoverishing the soil, it seems to improve it; and that the produce, after twelve consecutive years trial of Mr. Smith, has increased rather than diminished, that of 1858 being forty bushels per acre.—Hence, it is thus demonstrated that tillage alone, by stimulating the soil and promoting the absorption of elementary matters from the atmosphere, is sufficient to sustain its fertility.

As we have said above, the proofs of Mr. Smith's success in prosecuting the Tullian system, do not admit of a doubt. But, to bring the matter home, as to spade tillage, our people would never dream of adopting it any further than limited garden culture. In the vicinity of large towns, root crops, in fact, all kinds of vegetables, could, we doubt not, be raised economically, and of a larger size perhaps, and of better quality than can be obtained by the usual process. This is our opinion, and we hope to

see the experiment made by some of the enterprising and intelligent culturists of Mobile and New Orleans. As regards field culture, we think by using the subsoil plow instead of the spade, very satisfactory results would follow, though of not so marked a character as Mr. Smith obtained.

As to your soil, bottom, I believe, has not yet been found—we mean the alluvial—but we are confident that a garden, treated according to Mr. Smith's plan, would exhibit a wonderful increase in product. And it would probably also show that drought would have no effect in checking the growth and cutting off the yield of crops.

W. W. M.

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HORACE GREELEY'S ENDORSEMENT OF THE AGRICULTURAL PRESS---HOW GOVERNMENT CLOGS ITS WHEELS INSTEAD OF AIDING IT.

There are at present some fifty or sixty periodicals published in our country, devoted to farming—as many, I presume, as in all the world beside.—They have been built up at great expense of talent, labor, and money; for, when Col. Skinner started the first of them, at Baltimore, some forty or fifty years ago, the idea of teaching farmers anything in that way was hooted by them as ridiculous, and he found it hardly possible to give his early numbers away. Hundreds of thousands of dollars have been spent on these publications; and they are this day, in my judgment, doing more to promote the true growth of the country, and the substantial and enduring welfare of our people, than Congress, the Army and the Navy, for the support of which they are taxed some forty millions per annum. Their publishers are asking nothing of the Government—wishing nothing but the common rights of American citizens. Yet Congress pays annually for gathering and compiling the material for a publication necessarily rival to theirs, of which the House has just ordered 300,000 copies, and the Senate, I believe, 50,000—all to be printed, bound, enveloped, and conveyed to the recipients in every part of the country at public cost—that is, at *their* cost and mine—and thus distributed in most unfair competition with the Agricultural journals, and to enable penurious and easy-going farmers to say, "Oh, I don't want to take one of these—I get a Patent Office Report from our member of Congress every year, and that will do for my boys to chew upon till another comes around!" Thus Congress is doing its worst to undermine and destroy the Agricultural Press, by a policy which you heartily support—which, I grieve to say, has been practically supported by a majority of the Republicans, in both Houses, throughout the late Session, while opposed by a majority of the Democrats. I am very glad of any chance to do honor to my political opponents; and I must say that, on this question of abolishing the Franking Privilege, they appear to great advantage in contrast with most of the Republicans.

Greeley to Senator Wilson.

REMARKS.—We publish the foregoing endorsement of the agricultural press, by Horace Greeley, not because within the line of our calling, but be-

cause we believe it. It has been a well settled conviction of our minds, for a long time, that the agricultural press of the country, with its weekly and monthly issues, teaming with all that is suggestive, instructive or useful, opening as it does a ready channel of inquiry between all the *reading* farmers of the State or nation, becomes a more direct and efficient agent of thought, action and progress, than any other one or a dozen instrumentalities that can be mentioned.

Still, we are aware that it is an opinion not generally entertained. We have often heard Governors in their messages, and lawyers in their agricultural addresses talk learnedly of other great agencies, in the way of agricultural schools, &c., &c., that were advancing the agricultural world, and at the same time wholly ignore the great agricultural press of the country, as entirely as if it did not exist at all. All very natural, to be sure, as such men seldom read anything but political papers, still they are employed as expounders in agriculture, not because they know anything about it, but merely because they can talk, (so can a parrot, if some one will put the words into its mouth.)

The agricultural journals, as a whole, are but poorly sustained. We do not believe that one-third of them pay their publishers one penny for their labors. True, a few, at a favorable location, with good luck, or great talents, pictorial illustrations, or trap, get up a large circulation, and, possibly, make something out of it; but the great mass, whistle as they may to keep up their courage, are making but a small fortune for old age. The legal advertising, often so profitable for political papers, they know nothing about. True, some very generous county agricultural society will occasionally put them on sparingly as premiums, provided they can get them at cost or a little less, but thick-headed, penurious farmers (and there are lots of them), who have to take them instead of some ragged dollar bill, not unfrequently deem themselves very badly used.

Agricultural journals that are worthy of their high mission, should be sustained to a much greater extent than they are by the agricultural societies, and in the way of premiums, it would operate as a double benefit; first, by putting such reading in the hands of many men and their families as would not have the liberality to subscribe for it; secondly, such patronage, upon an ordinary liberal plan, would, in some measure, sustain and warrant the publication of good and useful journals. The *School Journal* of our State has a subscription list of five thousand, or thereabouts, from the treasury, which sustains it; but, alas! for too many of our agricultural papers; what its tardy subscribers do not pay, must be lost by the publisher, or cheated out of his printer.—Will those who believe with Horace Greeley, in the usefulness and high mission of agricultural journals, think of these things, and do what they can in their day and generation, for a worthy but a suffering cause?

MAN may err, and be forgiven; but poor woman, with all his temptation and but half his strength, is placed beyond the hope of earthly salvation, if she but once be tempted into crime.

TRAINING COLTS.

We extract the following excellent remarks on training colts, from an article in the *American Stock Journal*:

"The principles which should govern the trainer are kindness, patience, and firmness. In training colts they should receive firm, but gentle treatment, and in nine cases out of ten, spoiled and vicious horses are made so by harsh treatment, or the most culpable carelessness and mismanagement.

The first thing to be done is to accustom him to the harness and bit. For this purpose, they should be put on carefully, to avoid frightening the colt, in the stable, and let him stand tied with them on all day. In this way he will soon become reconciled to wear the harness, and also make some acquaintance with the nature and use of the bit. The next step will be to lead him about with the harness on, and after he becomes used to this a little, he should be coupled alongside of a steady, reliable horse, the lines put on, when they should be led and driven about together for an hour or so, or until he learns to yield to the pull of the reins, and to start and stop at the word. When, in the judgment of the trainer, the animal is sufficiently gentled, and has become acquainted with and reconciled to this treatment, he may be hitched to a light wagon, taking care to have the tongue well up, and the traces supported by carrying straps extending across the hips, and secured at the proper points, to prevent them from hanging too low, when the colt is not pulling. The utmost care should be used to prevent the colt from getting his legs over the traces or tongue, as more kicking horses are made by this mishap than any other cause. When all is ready, the driver should take his seat in the wagon, and the colt should be led a short distance by an attendant, when, if he goes well, he may release his hold, and take a seat also in the wagon, to be on hand in case of accident or emergency. The length and duration of the drive should depend principally upon the disposition and behavior of the colt, for he should not be unhitched until he is tired enough to be submissive and obedient. The same care and precautions are necessary to be taken for a few times, that are observed in giving the first lesson.

The gait at which colts are driven in taking their first lessons should be moderate. A good walk is of great importance, and for the sake of acquiring this the horse with which they are driven should be a fast walker. It is best to teach one thing at a time, and the colt should be taught to walk well before he is pushed in his trot—otherwise, in his hurry his gait will become awkward and confused. Indeed, I believe the principle will hold good in all cases, that the horse should not be hurried in his gait, whatever it may be, faster than he has learned to perform it well; its practice invariably produces a shuffling, scrambling movement, inimical to speed and beauty of action. Before the colt has been driven many times he should be shod, particularly the fore-feet, because if they get tender or sore, he will be inclined to paddle, a habit difficult to be corrected, and should therefore be well guarded against.

After a colt is well broke to drive in double harness, he may be geared singly to a light carriage,

or what is better, a sulky, using the same care as when first commencing to drive him double.—Riding on horse-back, although a very pleasant and healthful exercise, is so much out of fashion, that it is scarcely necessary to say anything on the subject. As a general rule, colts are ridden too young, and if I was going to break a colt to ride, I should not commence until he was five or six years old.—The practice of fast driving down hill, and carrying heavy loads upon their backs while young, injures more horses in their shoulders, knees and feet, than any other causes with which I am acquainted, and cannot be too strongly condemned."

From the *Southern Rural Gentleman.*

TRUE COTTON PLANTING ECONOMY.

MR. EDITOR:—The time is fully come for saving the cotton crop of 1860. The signs in the commercial circles show the necessity of saving it, as there has never been one saved before—at least, for many years, and perhaps not since cotton has become the leading article of commerce, or King, as it is sometimes called.

I can better portray what is the real interest of the cotton planter, by taking up the subject at seed time, and going with him through the harvest; and indeed, until he has got his returns and his money.

The planter who has twenty hands, under the present economy, plants twelve acres in cotton and four in corn to the hand; or, in round numbers, two hundred and forty acres in cotton and eighty in corn, and makes two hundred and forty bales of cotton, and corn enough to feed his negroes and mules through the next season, and is pressed from the 15th of August to the 1st of February to gather his crop in a condition to secure for him 8 cents per pound, or \$6,880 for his crop, and all his meat, mules, and plantation implements to buy, (and many of them from the North.)

On a cotton plantation working twenty hands, and saving two hundred and forty bales of cotton, you will find at least thirty negroes, and they will eat at least one barrel of mess pork each, making thirty barrels, at \$20 each, \$600; five new plows, at \$8 each; five sweeps, at \$6 each; five scrapers, at \$6 each: making one hundred dollars for the leading articles of tools, such as should be made on the place, at less than half this cost. Two mules, at one hundred and seventy-five dollars each, \$350, making \$1,050 for the leading articles of plantation expenses, and deducting \$50 for the cost of the iron that would make the plows at home, leaves the snug little sum of \$1,000; out of this small sum of \$6,880, leaving to the planter \$5,880, and he may thank his stars if he does so well.

We will now take the plantation, working the same number of hands, and making all it consumes, and see the result. Sixteen acres are cultivated, eight in cotton and eight in corn. Eight bales of cotton are gathered in good style, and this done between the 15th of August and the 1st of January. Now these twenty hands, at eight bales to the hand, will make one hundred and sixty bales, and the weight is sixty-four thousand pounds, which, at 12½ cents per pound, is \$8,000, and nothing to buy, against \$6,880, and everything to buy. For the

difference in time and cultivation will make all the meat, all the plows, and all the mules, besides all kinds of vegetables, which are vastly conducive to health and comfort on the plantation. The difference in this plantation, under the two systems of economy, is in favor of the latter, or make everything system, \$2,120, and I do not doubt, but that on a thorough trial, it would be found even to exceed that amount; and, particularly if the whole country would adopt this policy, for then the falling off in the amount of the crop would increase the demand, and thereby raise the price as much as it would be increased by the difference in handling—and it would not be unfair to calculate that to diminish the crop one-third, and gather it as it ought to be gathered, would double the price. Planters, try it! plant your six or eight acres in cotton, and the remainder of your land in corn; and, if need be, open more land to plant in corn, oats, wheat, rye, grass, and to set out in fruit trees.

Get brood mares, cows, hogs, sheep, and raise your horses, mules, beef, pork, mutton and wool in abundance, and in fact everything that you need that the climate will produce, and my word for it, you will grow rich and be happy.

BOLIVAR.

From the *Darlington Southerner.*

HORSES AND MULES.

READ BEFORE THE DARLINGTON AGRICULTURAL SOCIETY.

There is no animal more necessary to man than the horse; none upon which he is so dependent; and none other that has suffered so deeply from the ills incident to man's fallen condition. The horse is literally man's companion; at the same time he is emphatically his servant. In no condition of society, from the most civilized and enlightened to the most rude and barbarous, can the services of the horse be dispensed with. Even in our enlightened age of steam-power, and other facilities for locomotion and inter-communication, were the horse to be stricken from existence, society would immediately come to a stand—no other animal can be found to fill his place.

No other animal exists whose labors, toils and suffering are so poorly requited by the necessary care and kindness of man, as the horse and mule. In the past ages of the world, the horse and mule were, emphatically, the right arm of commerce, as well as of war and agriculture. In the two latter departments, his position has not been superseded by the invention of genius, though his toils and sufferings have been greatly mitigated.

As we have already remarked, the horse and mule are truly the right arm of agriculture. Without their aid we are unable to remove heavy burthens on the farm, from one point to another; we rely upon his strength for breaking up and continually pulverizing the soil, thus saving an immense amount of manual labor. But it is needless, before this Society, for me to enlarge further upon the various uses and the services required of the horse and mule. The subject connected with this Report, which most

deeply interests this Society, and most naturally claims its attention at present, is the *exorbitant prices* demanded in the purchase of mules and horses; also, the very great probability of prices continuing to rise in future. The supply, of course, cannot be equal to the demand, and this great demand is not only kept up, but greatly increased, from the want of that proper care and treatment of our stock, which would insure the lives of many that annually meet with an untimely death.

The raising of mules (a hybrid which does not propagate its species) may be adduced as another reason why the supply continues to fall so far short of the demand. The natural tendency of this system is to exterminate this race of animals. But the very great cause of scarcity of horses and mules in the market, is owing to the fact that the southern and south-western planters depend, almost exclusively, upon the North-western States to supply their markets, rather than appropriate a portion of their capital to the raising of stock for home use, and the supply of home markets.

This unnecessary and unnatural dependence causes the planter to pay dearly for the whistle, when he is compelled to raise cotton on poor land, with which he is to purchase mules and horses at exorbitant rates.

Stern necessity will very soon teach the Southern agriculturist the great importance of taking more care of his stock, though he may be deaf to the claims of humanity.

It is a great reproach upon the southern planter, both in view of humanity and economy, that we compel our work-animals to waste so much muscular power in performing the office of straw-eutter, corn-sheller and grist-mill, after the labor of the day is over, before they can prepare the food which nature requires to sustain the body, necessarily depriving them of much time for the rest they so much need.

The planter will find it to be true economy to provide snug and secure stables where his horses may rest in safety, after the labors of the day have been performed. He will also find it economy and to his interest, to procure a good straw-cutter, corn-sheller and grist-mill; attach all to a light set of east-iron machinery, in the same building, to be driven by horse-power.

Two-thirds of the grain which we feed away to our animals, if properly prepared, will yield more nutriment, and keep our horses in better condition, than the whole quantity now fed away in its indigestible form. Every one who has the least observation will know, that a great deal of the food fed away in its crude state, is taken into the system before it has been masticated, and consequently does not yield one iota of nourishment to the animal. We need no stronger evidence of the want of Southern thrift than the fact, which not unfrequently meets our eyes in passing many farms, where we see the stock standing in open lots, exposed to the scorching rays of the sun in summer, and the drenching rains of winter, anxiously waiting for a scanty meal. Perhaps, after the horse has performed the labors and toils of the day, he finds himself compelled to carry his hard earned supper on his back

to a distant market, to satisfy the avarice of some dishonest negro, or more dishonest negro-trafficer.

Again, many cases of fatality among horses are owing to a want of knowledge on the part of the owner as to the real disease with which the horse is attacked, as indicated from the symptoms. Every owner will occasionally find himself at a loss to determine the character of the disease, consequently, much work is done in the dark, and many remedies used, which absolutely prove deleterious, instead of beneficial. Probably it would be well if our State Agricultural Society would offer premiums to men acquainted with comparative anatomy, for dissertations on the diseases of horses. Those dissertations, to be written after post-mortem examinations have been made, to be submitted to competent judges, who will determine their comparative merit, and have the same published for the benefit of all interested.

Respectfully submitted,

WM. E. JAMES, Ch'n.

HOW TO RAISE HOGS.

A. G. Mullins, of Kentucky, in a communication to the *Genesee Farmer*, offers the following hints on the raising of hogs:

We intend not to say how a few hogs can be raised to an advantage, but how a man may raise them as a business, with the least labor and expense, and leave the land in the best condition. All farming, in my opinion, ought to be conducted with a reference to the continual improvement of the soil.—Present gain, by a deterioration of the soil, will ultimately prove to be a loss.

To succeed in raising hogs, as in other stock, we should have a good breed. The Berkshire crossed with our common hogs, constitutes a very good stock. The Berkshire communicates its fattening properties and early maturity—two very desirable qualities—and the common stock gives size. A cross of the Berkshire on the Irish grazier makes a very good stock.

Say we have a good stock to begin with; a stock that matures early and fattens well. The pigs should come from the middle of March to May.—There is a great advantage in pigs coming at this time, as we can graze them through two summers, and have them to keep only through one winter.—They come to be of fine size by the second fall or winter. Hogs may be pushed into market younger, but at more expense in grain; and they will be smaller at fattening time, which is a great disadvantage.

The greatest profit in hogs is in grazing them, and turning them upon grain fields, where they can gather for themselves: and having them large and in good condition at fattening time. The sows and pigs should be kept in good growing condition, by feeding them on Indian corn, or corn meal made into slop. As soon as the clover begins to blossom, or a little before, turn them upon it. Sows and pigs should still be given some grain, while in the clover. Have a field of oats early sown—the size of the field to be in proportion to the number of hogs—and as soon as the oats are ripe, turn the hogs upon them to gather for themselves. To pasture hogs to the best

advantage through the summer, it will be necessary to sow a field of rye, as above, and after they have eaten the oats, turn them upon the rye. Though the rye will be ripe before the oats, it is thought better to let the beards rot, and it will keep good in the field until September; whereas the oats will rot in a short time. After the hogs have eaten the rye they may go upon the clover again. They then should have old corn to keep them from being reduced in flesh; the second crop of clover not being as good as the first. This method may appear very wasteful to those not familiar with it; but if a little grain is left on the field, it will be an excellent fertilizer, and the straw and everything that grew on the field is left there, except the fat that is driven off with the hogs. This leaves the field in good condition for the next year.

The hogs should be kept in good condition through the winter and spring. The best place to winter them is in the woods, and let them have low, long, dry shelters to sleep in. Let them be turned on the clover the second year about the time it blossoms, and I prefer to give them a little grain. Then let them go on the oats and rye as they did the first year. When they come off the rye the second year, it is very important to grain feed them while on clover, until they are put up to fatten. It is a great advantage to have hogs large and in good condition when fattening time commences. A lot or small field of corn, early planted, to turn on about the 15th or 20th of September, is an excellent plan; or fence off, with a temporary fence, a portion of a larger field. Continue the hogs in the field until about the middle of October or the first of November; then take them to a field intended to be plowed for next season (a clover field is best), and feed them plentifully until about the first of December, at which time they will be fit for market or slaughtering.

By feeding down upon the field, you save the labor of gathering, and leave all that grew upon it, except what is driven off in fat upon the hogs. By sowing the field in rye a few days before the hogs are taken off, a fine crop can be obtained. The grain left upon the fields pastured during the summer, will soon spring up, and afford a fine fall and early winter pasture. If it be intended to sow the oat and rye fields in clover, the pasturing down of the grain makes no difference. Take off the hogs as soon as they eat the grain. The decaying straw and manure left upon the field will be an advantage to the clover.

The hogs should be well salted, and have access to water. From the middle of October to the first of November, it is important to have a good, dry shelter for them to sleep in; earlier than that, they will generally sleep in the open air. If it is desired to fatten hogs the first season after we commence raising, of course we must buy them of suitable size in the spring. The number kept to breed from must be suitable to the number we want to raise.—A good brood sow will raise two litters a year, and from six to ten at a litter. A little experience in this matter will direct us aright.

By a strict attention to the above method of raising and fattening hogs, as much or more can be obtained for the grain than it can be sold for, and

all of it fed upon the farm, which is no small consideration. By raising grain and selling it off the farm, it will be becoming poorer. By raising and judiciously fattening hogs, the farm will be growing richer. This, in ten years, will make a great difference. I have known some farms, reduced almost to sterility by bad management, by a proper management in sowing rye, and oats, and clover, and feeding them on the ground, made very productive. Feeding Indian corn upon the land is very improving to it. I once knew a field planted in corn for four years in succession, and the last crop was as good as any that preceded it.

In regard to the worth of grain fed to hogs, I made one long-continued experiment, which satisfied me that it is remunerative. Some years ago, I had a lot of corn which I could sell for only twenty cents per bushel. I concluded I would feed it to some pigs, which came about New Year's. I gave them two ears a day each until April—about ninety days. I weighed an average one on the first of April, and it weighed fifty-two pounds. It was then worth two and-a-half cents per pound, or \$1.30. It had eaten one and-a-half bushels of corn. I then increased the feed to three ears per day, until the 15th of July—about one hundred and six days.—Each ear, from April until the 15th of July, three hundred and eighteen ears; weight one hundred and thirty pounds, and worth \$3.25. They had eaten each, from January to the 15th of July, four hundred and ninety-eight ears—not five bushels of corn, which was only worth \$1; whereas the shot was worth \$3.25. While corn was worth only \$1 for five bushels in the market, less than five bushels was worth \$3.25 fed to hogs. This was effected without clover in the summer. By calculating the above weights at four to five cents per pound, you will have the worth of the pigs at present prices.—This convinced me that corn can be profitably fed to hogs.

I think now I have redeemed my promise; shown how hogs can be raised as a business, at the least amount of labor and expense, and leave the land in the best condition.

INFLUENCE OF WATER IN COOKING VEGETABLES.—If one portion of vegetables be boiled in pure (distilled or rain) water, and another in water to which a little salt has been added, a decided difference is perceptible in the taste and odor, and especially in the tenderness of the two portions. Vegetables, boiled in pure water, are vastly inferior in flavor. This inferiority may go far, as in case of onions, that they are almost destitute of odor or taste, though when cooked in salt-water they possess, in addition to the pleasant salt taste, a peculiar sweetness and a strong aroma. They also contain more soluble matter than when cooked in pure water. Water which contains 1.420 of its weight of common salt, is far better for cooking vegetables than pure water, because the salt hinders the solution and evaporation of the soluble and flavoring principles of the vegetables. This explains the advantage of the general use of salt in cooking, and the impossibility of correcting, by subsequent additions of salt, the want of flavor in vegetables that have been boiled without it.—*Prof. Boethgen.*

THE KITCHEN.

We will give to intellect, to immortality, to religion, and to all virtues, the honor that belongs to them. And still it may be boldly affirmed that economy, taste, skill, and neatness in the kitchen, have a great deal to do in making life happy and prosperous.

Nor is it indispensably necessary that a house should be filled with luxuries. All the qualifications for good housekeeping can be displayed as well on a small scale as on a large one.

A small house can be more easily kept clean than a palace. Economy is most needed in the absence of abundance.

Taste is as well displayed in placing the dishes on a pine table as in arranging the folds of a damask curtain.

And skillful cooking is as readily discovered in a nicely baked potato, or a respectable johnny-cake, as in a nut-brown sirloin or a brace of canvas-backs.

The charm of good housekeeping is in the order, economy and taste displayed in attention to little things; and these little things have a wonderful influence.

A dirty kitchen and bad cooking have driven many an one from home to seek for comfort and happiness somewhere else.

Domestic economy is a science—a theory of life, which all sensible women ought to study and practice. None of our excellent girls are fit to be married until they are thoroughly educated in the deep and profound mysteries of the kitchen.

See to it, all ye who are mothers, that your daughters are all accomplished by an experimental knowledge of good housekeeping.—*Tennessee Farmer.*

TREATMENT OF CHRONIC COUGH.—Chronic cough is an affection very prevalent among horses, and is often occasioned by a morbid irritability of the membrane, which gives an internal covering to the respiratory passages; for the treatment of this kind of cough the following is recommended:

Balsam Copiaba,	- - - - -	1 oz.
Sweet Spirits of Nitre,	- - - - -	2 oz.
Syrup of Garlic,	- - - - -	4 oz.
Glycerine,	- - - - -	2 oz.
Mix.		

DOSE.—1 oz. of the above mixture constitutes a dose; the same is to be given once daily, diluted with a small quantity of water.

In the treatment of all cases of cough, depending on irritability of the respiratory membrane, it is advisable to allow the patient a generous supply of flaxseed tea, or flaxseed mucilage, which will tend materially to lessen the cough, and will improve the condition of the patient.

SCOURS IN CALVES.—Nothing is so good to stop this complaint, says the Massachusetts *Ploughman*, as loam from the field. Calves should be weaned on hay; but they should always have sods of earth beside them in the barn. This is new to us. Carbonate of lime, it is well known, will check the scours; and perhaps it is this ingredient of the loam which renders it efficacious; and if so, pulverized limestone would be most effective.

RULE FOR PREDICTING THE WEATHER.

About a year ago we mentioned, without attaching much credit to it, an empirical rule by which the weather might be predicted, with tolerable certainty, during the last twenty-four or twenty-five days of a month, from that which prevailed during the former ones. This rule is now, however, again brought forward, with such additional arguments in its favor, as to induce us to return to the subject.—It appears that it was the late Marshal Bugeaud who discovered it in an old Spanish manuscript; he was struck with the great number of observations from which it had been deduced, extending over more than fifty years, and resolved to verify it himself. The result of his observations was so satisfactory, that he soon got into the habit, in Algeria, of consulting the rule on all occasions when some important military or agricultural operation was in contemplation. The rule is as follows: "Eleven times out of twelve the weather will, during the whole lunation, be the same as that which occurred on the fifth day of that moon, if on the sixth the weather was the same as on the fifth. And nine times out of twelve the weather of the fourth day will last throughout the moon, if the sixth turns out to be like the fourth." The Marshal used to add six hours to the sixth day before pronouncing on the weather, in order to make up for the daily retardation of the moon between two passages across the meridian. It is clear that this rule may not be always applicable, there being nothing to prevent the sixth day from being quite different from the fourth and fifth. M. de Couluek, of Havre, has just published his observations, continued for ten months, and which completely confirm the rule.—*Galignani's Messenger.*

HAY FOR ONE SHEEP.—In reply to the question, How much hay will a sheep consume during the winter months, the Michigan *Farmer* remarks as follows:

The usual rate of the consumption of food is at the rate of 3½ lbs of hay daily, for every 100 lbs of live weight. If we take the average of flocks, the live weight of 100 common sheep would be about 7,500 lbs, or from that up to 8,000. It is rare that a whole flock of fine wool'd sheep will average more than 70 lbs for each head, though it may be that this weight is exceeded in some instances. At the rate mentioned, a flock of 100 sheep should use up or consume 280 lbs of hay per day, or a total of 25 tons in the winter season, that lasted 180 days. This would also equal 504 lbs to each single sheep, or it may be stated as a general rule, that a full grown Merino sheep, averaging in live weight from 75 lbs to 100, will consume during the winter season a quarter of a ton of hay, or its equivalent, if comfortably kept. If grain forms a part of the ration, of course some of the hay may be saved; but if the animal is to be kept growing wool, it will need its full ration of hay, and a little grain too.

DRAINING OF WET LANDS, MARSHES, &c.—This process improves the health of neighborhoods, and adds to the value of the localities in which it is practised, causing them to produce earlier and better crops.

How to DESTROY REE-MOTHS.—A correspondent of the New York *Evening Post* gave, last year, an account of his success with a plan which he adopted for the destruction of millers or bee-moths, as follows: "When the season arrived, I put out a *white plate*, containing a mixture of molasses and vinegar well stirred up together. This I continued through all the warm nights of latter part of July and fore-part of August, setting the plate at night on a level with the bottom of a hive and near to it, and removing it in the morning. My success was complete. I counted each morning the number of millers caught during the night in the liquid on the plate, and in three or four weeks I trapped and killed one thousand. They do not fly much, except in very warm nights, and seem to discontinue their operations about the middle of August. I mention these facts for the benefit of those who keep bees, and I have strong hopes, that by adopting and making a thorough trial of this trapping system, the depredations of the millers may be arrested, and that they may be finally banished from the apiary."

THE following table, from Sheppard's "Hand Book," exhibits the proportion of nutritious matter and water, contained in 100 lbs of each of the substances named:

Substances.	lbs.	lbs.
	Nut. Mat.	Water.
Apples.....	16	84
Apricots.....	26	74
Barley Meal.....	88	12
Beans (White).....	95	5
Beets.....	15	85
Cabbage.....	7 $\frac{1}{2}$	92 $\frac{1}{2}$
Carrots.....	10	90
Cherries.....	25	75
Corn Meal.....	91	9
Cucumbers.....	2 $\frac{1}{2}$	97 $\frac{1}{2}$
Grapes.....	27	73
Melons.....	3	97
Oat Meal.....	75	25
Peaches.....	20	80
Pears.....	16	84
Plums.....	29	71
Potatoes.....	22 $\frac{1}{2}$	77 $\frac{1}{2}$
Rice.....	86	14
Rye Flour.....	79	21
Strawberries.....	10	90
Turnips.....	4 $\frac{1}{2}$	95 $\frac{1}{2}$
Wheat Flour.....	90	10

THE TALENT OF SUCCESS.—Every man must patiently abide his time. He must wait. Not in listless idleness, not in useless pastime, not in querulous dejection, but in constant, steady, cheerful endeavor, always willing, fulfilling and accomplishing his task, "that when the occasion comes, he may be equal to the occasion." The talent of success is nothing more than doing what you can do well, without a thought of fame. If it comes at all, it will come because it is not sought after. It is a very distressing and troublesome ambition which cares so much about fame, about what the world says of us, to be always looking in the face of others for approval, to be always shouting to hear the echoes of our own voices.—*Longfellow.*

CALVES—TREATMENT WHEN AILING.—A correspondent of the *Mark Lane Express* sends the following recipe, recommended by a veterinary surgeon, as an almost infallible remedy for diarrhoea in calves: Boil two ounces of senna leaves slowly, in a quart of water, down to a pint; add a pinch or two of ginger. To a calf from ten days to a month old, give half the quantity, administering it slowly with a small horn; give the other half if necessary, which is seldom the case, in six or eight hours.—To a calf above a month old, the whole pint may be given. For a calf under ten days old, suffering from either scours or constipation, I have found a dose consisting of one or two yolks of eggs, beaten up in an ounce and-a-half or two ounces of castor-oil, very efficacious. Calves should always have salt and lumps of chalk to lick.

BUGS AND CUCUMBERS.—Mr. Bergen, of Long Island, recently stated that some farmers in his neighborhood plant as much as ten acres each of cucumbers, and that the way they save them from bugs, is to use plenty of seed at first, and then at four or five successive periods they plant on a new side of the hill, a lot more of seed. This supplies an abundance of young plants for the bugs to feed on, and they leave the stronger growing plants untouched. When well out of the way of bugs, the surplus plants are dug up with the hoe.—*Homestead.*

A SOUND OPINION.—A correspondent of the *Ohio Cultivator* is responsible for the following suggestive sentence: If farmers would do their fall work "in the fall," and their winter work "in the winter," and be ready for the spring work "when the spring arrives," they would make more money, and get along much easier than they do. Let every farmer look at his own practice under this light, and he will see some place where he can mend it. We cau on our farm.

SCRATCHES IN HORSES.—A correspondant to the *New England Farmer* says, that what is called "bright varnish," sold at paint-shops, is a sure cure for scratches, and that he has used it for cuts on human flesh with remarkable success.

FICTIONS are revelations not of truth, for they are most unreal, but of that which the soul longs to be true; they are mirrors not of actual human experience, but of human dreams and aspirations of the eternal desires of the heart.

God never sends an angel to afflict a human soul but when another follows in its footsteps to heal and to bless.

If you hear a person saying that he has not a friend in the world, you may be sure that he does not deserve one.

THE greatest gluttons are those who feed upon slander.

You may depend upon it that he is a good man whose intimate friends are good.

The Farmer and Planter.

COLUMBIA, S. C., NOVEMBER, 1860.

HINTS FOR THE MONTH.

The great pressure of the cotton picking is beginning to abate, and every planter now begins to know something of his true condition. His corn has been housed; his hay, tops and fodder stowed away; the stock have been turned in winter quarters, and he can very easily calculate his resources and his deficiencies, and begin to prepare to meet them as soon as possible. Has he prepared rye and barley lots? If not, delay it no longer. Has he sowed wheat?—If not, do it as soon as possible. The later the wheat, the greater the chances of failure. Store up everything that will do for food; do not believe the old notion, that straw, potato vines, grass, &c., have "no strength in them."

Take care of your stock; keep them sheltered, regularly fed and salted, and give them every advantage in your power, before winter sets in. Slaughter your hogs as early as possible; it will save food, and trouble from insects hereafter.

Rainy Days.—Gin and pack cotton, repair houses, fences, &c.

Get your cotton to market as early as you can, and sell it whenever you are offered a fair price. It is always safe to sell cotton at 10 cents, and not always safe to store it.

Plantation Hygiene.—The most prevalent and fatal disease among negroes, perhaps, is Pneumonia. It is annually becoming more common, and as every disease now-a-days seems to have a proclivity to assume a typhoid type, the planter cannot watch too closely. It is his duty, and his interest too, to clothe well and comfortably, to feed well, and to watch well. The negro is proverbially careless and thrifless; he will never adapt his clothes to the season, or change his habits, unless driven to do so.

Good shoes, warm clothing, and comfortable quarters, are indispensable.

Have the cracks daubed or closed, fire places repaired, and wood provided. Guard against late hours and excessive possum hunting. For ordinary colds, red-pepper tea and salts, with cupping, when there is any pain in the region of the lungs, will be found beneficial; but whenever a negro is sick, send for a reliable physician. Pneumonia, plurisies, and sore-throat are not to be tampered with.

INFLAMMATION IN COW'S TEATS.—For inflammation in a cow's teats or bag, an application of lamp oil, it is said, will make them soft and well in twenty-four hours.

NEW SERIES, VOL. II.—43

THE CROPS OF 1860.

The importance of reliable statistics on the leading staples of the country was never more apparent than at this moment. We have long argued that this matter should be taken in hand by the agricultural press, and that every care should be taken that the truth and nothing but the truth be told. The most absurd stories are every year propagated upon newspaper paragraphs, written by those who know very little, or whose interest it is to deceive.

The truth is daily becoming more apparent that the value of the fruits of our labor is fixed in the speculators office, in New York; not upon the principle of demand and supply, but upon

"The good old rule, the simple plan,
That he shall take who has the power, and keep who can."

It is now a settled point, that the wheat crop throughout Virginia and Maryland was a failure; that the New York crop, although good, will not be more than her own wants demand; that it has been throughout Tennessee, Georgia, Alabama, South Carolina and North Carolina, a very light crop. A few months ago, we were told that the yield of wheat in the great West would be immense, and far beyond the wants of the country. In addition to this, there is every probability of a large demand from the Continent.

The corn crop has proved a failure throughout the cotton belt, and as corn cannot be transported cheaply, it will necessarily command high prices. We will also hear much of light weights and small measures. Our corn generally weighs sixty pounds per bushel, and it will go hard to take Western at fifty-two, or less.

The cotton crop has been very much exaggerated, but we have nobody to blame for it but ourselves.—There is no planter, of ordinary sagacity, who does not know that it is the most uncertain of things to calculate in June or July how cotton will turn out in October.

We saw statements a few months ago, giving every assurance of an immense crop, from gentlemen of high standing, in Mississippi, and now we see opinions expressed, from the same quarter, that half a crop will not be realized. The gusto with which some people enjoy the reputation of sending the first bale to market, or the first bloom to the village newspaper, is very dearly paid for. These little mole hills are soon raised into mountains; and when the story of an "unprecedentedly large crop is coming rapidly in to relieve the money pressure" gets to England, the sale of the hundreds of thousands bales of old cotton "hangs-fire," and we soon begin to hear of "exchange scarce, bills running to maturity, money pressure, hard times, and revulsions."

Cotton is King, but he has a very indiscreet, bab-

bling cabinet. His ministers are miserably poor fellows at keeping seerets, and, what is worse, never work together harmoniously.

Will we never learn anything by experience?—Will we never learn to lock the door until the steed has been stolcn? Or remember that, while it is our business to pick cotton, it is the world's business to pick our poekets?

But there is one thing we can all do—do better, if we but try. Let us sow wheat, rye, barley, oats, and grass; grind up our feed, cut up our straw and fodder, take care of our pea vines, bran, chaff, shucks, and everything that may answer for food; feed earcfully; protect our stock from the inelemeneies of winter, and do all we can to be independent. With the advantages of a genial climate we can do wonders, if we make the effort.

Keep no more stock than you can keep well, and throw away nothing that answers for food, shelter, or manure.

OUR BOOK TABLE.

The Bee-Keeper's Chart. By E. W. PHELPS. Sold by A. O. Moore, Agricultural Book Publisher, New York.

We have examined this hand-book on the habits and management of the Bee, with much interest.—It is a compilation from various standard authors, with the addition of the writer's own observations; and will prove a valuable acquisition to those who have not the time or inclination to study the more elaborate treatises on the subject.

ALMSGIVING.

"Ill fares the land to hastening ills a prey,
Where wealth accumulates, and men decay."

Our readers will find some sensible remarks, by the editor of the *Southern Planter*, in the present number, on the above topic.

It is a subject of more moment than most people think; but the fault, if there be any, lies at our own door. If the profession, calling, occupation, or whatever you may call it, upon which the prosperity of society is based, which, in its ranks, numbers more followers than all other professions in the land, has not a sufficient respect for its own position in society—if it has neither the intelligence to appreciate its importance, the pride to assert its rights, or the liberality to sustain the advocates of its own interests, it should never complain of being ignored by other professions.

It is a lamentable fact, that the best patrons of our Agricultural Journals are not always to be found among the planters; and it is a humiliating fact that many subscribe to an agricultural paper as if they were giving alms. "I'm sorry for the poor

fellow—here's a dollar—it aint much, and its in a good cause."

Thousands of dollars are annually eagerly sent North for sensation papers, which are a blight in every household, while every dollar given to an agricultural paper is like "pulling eye-teeth." We are a queer people, and old Soapsuds was right when he said, "if the outside was washed off, many a man wouldn't know his nearest neighbor."

"DE OMNIBUS REBUS ET QUIBUSDAM ALIIS."

There are times when we feel like taking a seat in our arm-chair, and indulging in a free and easy chat with our readers, upon little or nothings. This is one of them, and if you don't wish to be bored, reader, turn over.

Imprimis—we eongratulate the Publisher, Mr. STOKES, upon the accession to his list of several new subscribers. A letter before us, from one of the best and most experienced agricultural journalists in the Union, assures us that no man can afford to publish an agricultural journal at \$1 per annum, unless he is backed by a strong advertising patronage. That agricultural journals affords one of the best mediums for advertising, seems to be recognized everywhere more readily than in South Carolina. As evidence, nearly four out of six pages, in the October number, is taken up by foreign advertisers. Mr. SANDS, the editor of the *Rural Register*, one of the best agricultural journals in the country, takes a full page, because he knows it will pay. Mr. SANDS bears an enviable reputation as an Agent—his references speak for themselves. There are three advertisements!! from Columbia!! evincing a very ereditable interest in the success of an agricultural enterprise, by a city dependent upon agricultural success, and receiving annually thousands through the exhibitions of the State Society. There is fully ten times the amount of advertising done in every agricultural journal in the country; and it is no wonder that our people order nearly all their agricultural implements, seeds, &c., from Augusta, Baltimore, and New York. There is no evideuce that such things are for sale in Charleston or Columbia.

For the Farmer and Planter.

MR. EDITOR:—Among the good fruits of our Agricultural exhibitions, we are pleased to chronicle another evidence, in the recent importation of some very choice bits of blood, by Gen. S. R. GIST, of Union.—Among which there are two stallions—one a good brown, 16 hands high, with fine bone, and superior action; Young Flat Catcher, by Old Flat Catcher, dam Miss Gilmour, by Physician. This horse being akin to such animals as Touchstone, Filho de Puta, Velocipede, Charles 12th, is certificate enough. Bosquet, a

black brown, 15½ hands high, a horse of great power, good temper and action, well adapted to the hunting field, and par excellence, the very horse for all work. He is by Game Boy, dam by Muley Muloch, and running back upon Tramp, Comus, Anticipation, Beningbrough, Herod, Jerry, Bees Wing, &c.—There could be no better pedigree made to order.—Also, a pen of Southdown Sheep, prize animals, at Pontepreac, Yorkshire. Also, a pen of prize Pigs, from Yorkshire.

We congratulate the people of Union, somewhat famous for their fine horses, for so valuable an accession to the breeding stock, and hope it may induce other spirited gentlemen, who have similar means and tastes, to do likewise. They want now a Cleaveland Bay, and a Black Hawk Morgan or two, only, to be ready to take off the prizes in all the classes.

SINBOD.

THE CHANGE OF MOON CHANGE OF WEATHER.

“The moon takes up her wondrous tale,
And nightly, to the listening earth,
Repeats the story of her birth.”

WEATHER TABLE.

Constructed by Dr. Herschel—Improved by Dr. Adam Clarke.

Moon—Time of Change.	In Summer.	In Winter.
Between midnight and 2 A. M.	Fair.	Hard frost unless wind be S. or W.
Between 2 and 4 A. M.	Cold, with showers.	Snow and stormy.
Between 4 and 6 A. M.	Rain.	Rain.
Between 6 and 8 A. M.	Wind and rain.	Stormy.
Between 8 and 10 A. M.	Changeable.	Cold rain if wind W.; snow if E.
Between 10 and 12 A. M.	Frequent showers.	Cold and high wind.
At 12 noon to 2 P. M.	Very rainy.	Snow or rain.
Between 2 and 4 P. M.	Changeable.	Fair and mild.
Between 4 and 6 P. M.	Fair.	Fair.
Between 6 and 8 P. M.	Fair, if wind N. W.; rainy, if S. or S. W.	Fair and frosty if wind N. or N. E.; rain or snow if S. or S. W.
Between 8 and 10 P. M.	Ditto.	Ditto.
Between 10 and midnight.	Fair.	Fair and frosty.

The nearer the time of the Moon's Change, First Quarter, Full and Last Quarter, is to midnight, the fairer will the weather be during the seven days following. The nearer to midday or noon these phases of the moon happen, the more foul or wet the weather may be expected during the next seven days.

We very well remember, when a boy, how the country folks used to wonder at the annual publication at the schoolhouse and the tavern, for there were no country newspapers in those days, of the above weather table, by the village schoolmaster, of whom

—“And still the wonder grew
That one small head could carry all he knew.”

We must confess to having lost confidence in the worthy pedagogues wisdom, or the moon, fickle mistress as she has ever been represented, has *changed*.

An old weather-wise Dutchman once offered to bet us that the change in the weather would always occur either at the change of the moon, or three or four

days before or after it; a very safe bet surely, with four changes in a month to back him.

As we have but one moon, however, and its changes are the same to all of us, we cannot see why the people of one district or neighborhood should have rains while their neighbors are suffering for the want of them.

BRAHMIN CATTLE IN THE SOUTHERN STATES.

The New Orleans *Picayune* says: One of our neighbors, who has had much experience in the importation of foreign breeds of sheep and cattle, writes us a note that seems to us to contain some useful suggestions.

He says that Brahmin cattle were first introduced into the United States about ten years ago, and, as in the case of the mule, had to work their way into the good graces of our people, by positive proof of their real value. There are no cattle, he maintains, on the face of the earth, which render a profit to the holder equal to these. England may boast of her Durhams, Devons, Ayrshires, Alderneys, &c., and there is no question that, with high feeding, the English have brought their favorites to perfection, as fat cattle.

The Brahmins, for active work, our friend considers to be equaled only by that noble animal, the horse; while for the quantity of meat they yield, they are superior to the Durham, and their milk, for butter, is fully equal, in richness, to the Alderney, or Brittany, as some call them. Our correspondent thinks the Brahmin cattle to be particularly adapted to the Southern climate; and he expresses the hope that some of our planters, who had experience in the use of this particular stock, will be kind enough to lay before the public the results of that experience, especially in the acclimation of this useful animal.

We clip the above from an exchange. We have noticed, for some time past, that this breed of cattle is gaining rapidly upon public favor. The fact is admitted on all hands, that they are admirably adapted to our climate, and much more thrifty than any other breed.

We have examined, on several occasions, the herd of Capt. FRANK HAMPTON, and have always been struck by the superior condition of the Brahmin crosses.

We have no doubt of their superiority over all others for working cattle, or fat cattle, in this climate. What they may do in the dairy, remains yet to be settled by experience.

For the Farmer and Planter.

LITTLE OR NOTHINGS.

MR. STOKES:—I have received the October number of your journal, and congratulate you upon its prospect of success and its increasing merit.

That letter from Mr. Ruffin's farm is worth a dozen subscriptions, and I hope will set our farmers to thinking and acting. There is no doubt about the value of the pea as a rest plant, and we must rely more upon rest, rotation, and the making of our own

manures. Chemical fertilizers and guanoes will not pay, and if all speak out who have paid too dear for their whistle this year, you will have enough of it. I do hope we will hear from experimenters through your columns. The manufacturers and venders of fancy fertilizers will be certain enough to hunt up all the certificates in their favor—let us hear from the victims the other side. You shall have my story, certain, when the weights are added up.

I cannot understand clearly L. M. D.'s mode of cultivating corn. He is right as to putting in his cotton seed green, but he must put it deep, or it will sprout and come up. How he works 4 to 6 acres to the hoe, deeply hoeing and pulverizing, I can't imagine. But he is a good manager who can plow his corn every ten or twelve days, or keep grass from ever being in the way. I never could do it.

L. M. D.'s idea of moveable pens is a capital one, and worth general adoption. By the way, I saw a model of a fence near the Post Office, in Columbia, which I thought the simplest and most ingenious thing for this purpose I have ever seen.

“Bee Culture.”—I hope somebody may be able to give the desired information to S. The bee moth has, is, and ever will be, the great drawback to making honey. He can go wherever a bee can—no patent can exclude him. The only chance is to cripple his increase by fires at night, in the vicinity of gums, enticement of sweetened water, or something of that sort. You may examine your gums daily, sweep and kill, and thus cripple his progress; but he will wage his war in the night, and circumvent you.

I know some very successful bee culturists, who succeed best by placing their gums on the ground—while others do well for years on a bench, and then, perhaps, in one season, lose all.

I heartily join Robin Roughhead in his wishes, and hope, before Lincoln is elected President, that you may have as many subscribers as you want, all in advance.

B. M. J.

For the *Farmer and Planter*.

A VALUABLE REMEDY FOR SKIPPERS, &c.

FRIEND STOKES:—I think the *Farmer and Planter* deserving something more than my subscription, so I give you a recipe, worth many times the subscription price, at least to my brother countrymen who cure and eat their own bacon. It is a certain exterminator of Skipper and eggs.

Make a strong decoction of elder leaves and young twigs, and immerse the ham into it, boiling hot, for a minute or two. No bad taste or flavor is given the meat, while insect and egg is utterly destroyed. Applied cold, it will be found just as effective on the

live animal. The leaves and twigs, scattered about a room, and renewed as they become dry, will drive out 'roaches, and other kindred insects. I have driven ground-moles from particular beds in my garden, when troublesome, by inserting a few green leaves in their back paths. Those who will give the above a fair trial, will be amply rewarded for their trouble.

I say, Mr. Stokes, did you ever experience a more trying season than the one we planters have just gone through? Last spring was as bad or worse to get a crop up; but such cold weather, in all low, or even so slightly damp spots, cotton or corn found it equally hard to get up, as to live after it was up.

I do not think you should blame us, the people, for not coming to the aid of your paper earlier.—Thousands of us knew not of your existence. I have been wishing to hear of an agricultural paper published in old Carolina, but could learn of none, since the death of the one published by Col. Summer, and so you know now why I, for one, did not subscribe.

OLD ST. LUKES.

Bluffton, S. C.

[We thank “Old St. Lukes” for his valuable recipe, and kind feelings for our enterprise. We are confident that our friend's reason for not subscribing earlier, is the main cause of the small patronage we receive throughout the State. But how are we to inform the people of our existence? In nearly every District in the State there are one or more newspapers published, and during the year the *Farmer and Planter* receives many kind notices in their columns. It is true the Charleston papers but seldom give us a “boost,” consequently, we can easily account for the want of such information among the good people of the Parishes. Last Fall we sent one or two handsome show-bills to every Post Office in the State, with the request that the Post Master would “post them up in a conspicuous place,” but, on inquiry, a few weeks after, we could not hear of more than six so posted. The fact is, our show-bills were too great a temptation for the little negroes, and no sooner did they see the pictures of cattle and fruits on them, than the organ of self-appropriation was forcibly and practically developed.

There are 641 Post Offices in South Carolina, and 30,000 planters and farmers, making an average of 47 to each office. We send 2000 copies of the *Farmer and Planter* to only 397 of these offices, making the average number of 5 to each office.]

A Yankee in Boston has set up a one-horse *thrashing* machine, for the convenience of parents and guardians, having unruly boys. He'll lick an urchin like thunder for fourpence. Small lickings done for two cents only, and entire satisfaction warranted.

For the Farmer and Planter.

CURE FOR BIG-HEAD.

MR. EDITOR:—Permit me to inquire through your valuable journal, if any of its many readers know of a cure for the “Big-head.” I have a mare that has it, and I am loath to give her up as good for nothing. Many of my friends tell me that there is no cure for it, but I believe that nature, in distributing diseases, has also provided us with cures for them all, therefore I cannot give her up without an effort to cure her. If you, or any of your intelligent readers, can and will give me any information on the subject, it will be thankfully received.

BY A READER.

Mount Holly, S. C.

[We hope some of our readers, who have had experience in the disease, will give our friend the information he seeks. In the meantime, we publish below the remedy recommended by Dr. J. J. Broyles, in his “Premium Essay on the Diseases of Domestic Animals,” and published in the Transactions of the State Agricultural Society, for 1858.

Big-head is the common name of an enlargement of the bone of the nose, in a line between the eye and nostril, either on one or both sides.

“Rubbing the tumor well, once per day, with turpentine, spirits of hartshorn and camphor, equal parts, or any stimulating liniment, with a hot iron, will often cure, but some enlargement is apt to remain permanently.

If this is not successful, split the skin over the tumor, and insert 4 grs. arsenic, taking a stitch to secure it. Or, with a hot, sharp iron, destroy the diseased parts. After which, use some stimulating wash, as blue-stone 2*ʒ*, to 1 pt. water; or, nitrate of silver 1 gr., to 1 oz. of water; or, vinegar and water, applied every day or two.

Big-jaw is of the same nature, and requires a similar treatment.

From the Country Gentleman and Cultivator.

SHEEP HUSBANDRY.

SUDDEN CHANGES OF TEMPERATURE SHOULD BE AVOIDED—RACKS MORE ECONOMICAL THAN FEEDING ON THE GROUND—TAGGING.

Messrs. Tucker & Son:—The wool trade is getting to be one of the most valuable branches of American industry—so much so that all information in respect to the management of sheep, must be reckoned important by a large proportion of agricultural readers.

The following hints from my practice may be useful:

It has been distinctly shown by experiments, that sheep are exceedingly sensitive of any sudden change, either in food or temperature; and that these circumstances, as well as any disturbance, are very disadvantageous to their feeding. If it is

wished to secure the full benefits of their food, and the greatest profits of their keep, exposure to the sudden changes of the weather must be avoided. In the keeping of sheep, temperature is of much more importance than is generally imagined; both with regard to quantity of food consumed, and the benefits derived from it. Any one can ascertain this fact, by keeping one lot of sheep in a warm but well ventilated inclosure, and allowing another lot to rest and feed in the open air, exposed to the weather.—It will be found that those kept under cover will consume one-quarter less food, and still improve in flesh and growth of wool, double to what those will left out of doors.

The practice universally prevails amongst farmers in this region, of feeding their sheep on the snow, ice, or bare ground, as the weather may be. There is a great loss experienced in this way, as an ordinary flock will waste enough, by trampling under foot and otherwise, to more than pay the expenses of putting up racks and cribs for them under sheds or in a part of the barn. The greatest loss of outdoor feeding is in rainy or thawy weather, which occasionally happens in winter, and the most of the two last months before going to pasture. Sheep will not touch hay that has become wet. At this last season of feeding, flocks will tread under foot and waste as much hay as would, if fed, keep them in good condition. It is not a good practice to give sheep hemlock boughs to eat at this season of the year, as owing to their astringent qualities, when eaten liberally of by ewes with lamb, their effects would be injurious rather than otherwise. Better feed roots of some kind three times a week, with a handful of beans or oats daily. The roots will prevent a too costive habit, while both will serve to promote a flow of milk.

Before turning out your sheep in the spring, every one should be “tagged.” Any one who has not practiced it will find it a great improvement, as at shearing time they will find that the most vexatious part is done; besides, a saving is effected, of no small importance, in both time and wool, especially where large flocks are kept. In this way the wool is saved which is frequently shed, or becomes so coated with manure, that it is worthless, except for the manure heap, and the sheep are kept clean, affording a good, clean fleece to sell the manufacturer.

FRYE, JR.

STRUCTURE OF A GRAIN OF WHEAT.

The miller distinguishes in the wheat grain but two parts—the husk and the flour. The husk in grinding is separated from the body of the grain, and is called “bran,” meaning that which is torn off or rent from the main body. After the husk has been removed, this body appears to consist of a white, opaque, inodorous and tasteless mass, and may be regarded as a mass of starch. If a grain of wheat is cut across through the middle, the *husk, bran, or outer skin*, will appear as a narrow, brownish line, enclosing the entire mass; this skin bending inward forms the furrow which runs lengthwise in the grain. The hairy, or tufted end of the grain, is the upper, or end opposite that in which the embryo is enveloped. After having cut the grain across, if a very thin slice, cut in the same direction, be placed under the microscope, the thin, brownish skin will be found to consist of three layers or rinds, like peels of an onion.

The first of these layers is the outer skin, and consists of two ranges of thick walled, porous cells, whose shortest diameter is thus exposed to view, the walls of which contain slight hollows or little canals.

The middle layer consists of cells similar to those of the first, but with this difference, namely: the cell walls are not so thick, and the pores are much more distinct than in the first; this rind has its largest axis at right angles to that of the first.

The third layer is exceedingly delicate and soft, difficult to be properly defined by an ordinary microscope, or described, because of its indistinct definition.

Immediately beneath this last described layer or rind, are gluten cells. In these cells the gluten appears to be a faint yellowish substance, very small grained, oily to the touch and smell. The cells in which it is formed are rather larger than those of the three layers just described, the wall of which are perhaps more delicate than any others in the entire grain. The three layers and the gluten cells, before the recent inventions in milling machinery, were considered as "bran."

Directly under the gluten cells, lies the albuminous portion of the seed. This consists of hexagonal, prismatic cells, which are filled with ovoid granules of starch. These starch granules are enveloped in several layers of cellulose or cell membrane, which, when heated to excess in water, bursts and exudes the starch contained in them.

Wheat or flour is valuable just in proportion to the quantity of gluten it contains. In some qualities of wheat the gluten is more tough and fibrous than in others; flour-dealers, but more particularly bakers, determine the quality of flour by making a paste of a small quantity of it, and the tenacity of the dough, or the length of "thread" to which the dough may be drawn, determines with them the value of the flour.—*Maine Farmer.*

From the *Southern Cultivator.*

GRASSES IN THE SOUTH.

MESSRS. EDITORS:—At this time, when Northern and Western hay is selling in the South, at from \$2.25 to \$2.40 per 100 lbs, and so much of the attention of the Southern public is being directed to the growing of artificial grasses, I offer through the pages of your journal, a few thoughts, by way of contributing something to the advancement of this branch of husbandry, heretofore so much neglected, and so little understood in the South.

I frankly confess that I at one time entertained the opinion that the cultivation of the artificial grasses could never be made profitable at the South. I had supposed that the cultivation of grasses and cotton were necessarily incompatible in the same climate; that the length of season necessary to mature the former would prove fatal to the latter; and though this opinion may be true if applied to the real cotton belt, or at least the upper portion of it, yet it certainly is not true if applied to a vast portion of the Southern States, embracing the upper portion of the cotton region. Nothing has contributed more to change my mind on subject than the experiments, or rather decided success of Mr. J. H. Dennis, of this place, whose progress in the cultivation of the artificial grasses, I have closely observed for the last four years. And I now propose, without going into details, to give the main features of his

plan, which I do without his knowledge; for which liberty he will pardon me.

His farm is located about one mile from Atlanta; the land, though perhaps a shade better than the average in the vicinity, yet may be properly classed as poor. Of all the grasses he has tried for uplands, he gives a decided preference for timothy (*Phleum pratense*); he sows at the rate of from one peck to half bushel per acre, (he regards it as bad policy to be sparing with seed,) with wheat, as follows: The land is first thoroughly broken up, then 150 lbs of Peruvian guano is applied per acre, the wheat sown and harrowed in, and lastly the grass is sown, and again harrowed in lightly. The spring following, one bushel of Plaster Paris is applied per acre, which is repeated every spring as long as the land is kept in grass. I was much surprised to hear from Mr. D. that he had always failed to get a stand of grass when sowed with rye instead of wheat, the reverse of what I would have supposed. I mention the fact without attempting to give an explanation.

Land thus managed, has never failed to yield an increased quantity of wheat, sufficient to pay for the manures used, and the ensuing season from one to one-and-a-half tons of first-rate hay, without any additional fertilizer but the plaster. We noticed one field that had been in grass four years; it had completely taken possession of the land, thereby in the most effectual manner preventing the washing effects of rains.

Mr. D. has all of his permanent pasture sowed down in the same grass, instead of being allowed to run to broomsedge. It seemed to bear the trampling of cattle nearly as well as Bermuda, though hogs were not allowed to run on it without their noses being ringed, as without this precaution they prove very destructive by destroying the roots. Mr. D., in his first experiments, sowed red clover with the timothy, but has now pretty well abandoned it, from the fact that it only took possession of the soil where it was very rich, and even then would neither bear pasturing nor hot sun like timothy. He thinks more favorably of the orchard grass, but thinks it liable, to a considerable extent, to the same objections as red clover in the South. Has no hesitation in giving timothy a decided preference over both.

For low or moist lands, he prefers Herd's grass, (the red top of the North,) but his experience with this is limited, as compared with timothy.

Query—Would not some of the reliable super-phosphates combined with guano, say 200 lbs of the guano to 100 lbs of the latter, have done better than the guano alone? Would not white clover, which is hardy throughout the South, have done well mixed with the timothy?

W. P. HARDEN, M. D.
Atlanta, Ga., May, 1860.

GROOMING A HORSE.

"What do you give your horses to keep them in such fine condition?" asked a young farmer of his neighbor, whose team of bays was the pride of their owner, and the admiration of the village. "Oats, carrots, and plenty of *brush*," was the reply. There is little need of insisting on the necessity of good food, and plenty of it, to have a horse remain vigorous. Every one knows that bone, and sinew, and muscle are manufactured from hay, oats, corn, &c., and that the raw material must be supplied to produce the strong limb, elastic step, and noble spirit,

which make a fine horse the universal favorite he is. But the important part which the skin bears in the animal economy, and the necessity of properly cleansing and keeping it in healthy condition, are not fully appreciated. Rough staring coats, "grease" or "scratches," inflammations, and a whole catalogue of diseases, find their origin in neglect of proper grooming.

The skin of the horse, like that of other animals, not only affords protection to the parts within, but by the pores, affords an outlet to a large part of the waste of the body. In out-door life, the natural state of the horse, this membrane becomes thickened and tough, capable of resisting changes of temperature; and by continual exercise, the pores are kept open, giving free exit to all the exhalations. But this alone will not give the smooth glossy coat which adds so greatly to the animal's beauty. Confining the horse to the stable, as is generally done for at least part of the year, renders his skin tender, especially when he is kept warmly blanketed. Expose him now to great change of temperature; take him out and drive him until heated, return him to the stable, and let him stand uncared for over night, even for an hour, the sensitive skin is rapidly chilled by the evaporation of the sweat, the pores are suddenly closed, and often a cold, a rheumatic stiffness, or other disorder, results. Proper grooming prevents this, by toughening the skin, keeping it in healthy action, equalizing the circulation, removing obstruction from the pores, and what is of great importance, by rousing the action of the muscles at the surface, in some measure, compensates for the want of exercise, consequent upon stable life.

Currying and brushing should not be done in the stable; the dust and scurf will be scattered in the manger to mix with the horse feed, besides keeping the stable uncleanly. Take the animal into the open air, tie him securely, and handle him so gently that he will enjoy, rather than dread, the application of the comb and brush. A sharp curry-comb, roughly scraped over the tender skin, is anything but pleasant, as the shrinking and resisting animal will soon show. Apply this instrument lightly, and depend mainly upon the free use of the brush. Begin at the head, and pass the comb lightly up and down, until the dandruff is all loosened, and remove it with the brush. Be particular around the edges of the foretop, and the mane. It is a good plan to sponge off the head and ears, using but little water, smoothing the hair down to its natural position. In going over the back, quarters, loins, &c., use the comb in one hand and the brush in the other, working lightly and quickly. Take much pains where the skin lies in folds, as at the union of the legs with the body—let every part be made thoroughly free from dust and dandruff. Finish by rubbing down vigorously with wisps of straw, until the hair "shines like a bottle"—an extra smoothing touch may be put on with a woolen cloth. Do not fear all this trouble; it will be more than repaid in the extra looks and spirit of the horse.

E. H.

American Agriculturist.

DYSPEPSIA AND CONSTIPATION.

This disease is not to be cured by medical prescriptions got from books. You must get at the cause and remove it. Of a dozen dyspeptics, scarcely two may be affected alike. In many cases, abuse of the stomach is doubtless the source of the trouble.

All aperient pills increases the weakness which causes the complaint; to this rule there is no exception. All nostrums and patent medicines, of whatever pretensions, are injurious. In no case can any relief be obtained from their use.

Whoever uses tobacco or malt liquors, or other constant stimulant, or even coffee, and finds symptoms of indigestion, must first abandon these habits; and it will be time enough to think of active remedial treatment when it is found that the disease is not then removed. Whoever has a troublesome mind, or is confined to monotonous toil, without exercise of labor or bodily recreation, and finds himself dyspeptic, must first seek relief by correcting these causes: for, so long as they exist, pampering the disease, medicine can be of no avail.

If there be any drain upon the vital powers in any direction, beyond healthful moderation, it must be checked before we can hope to return to the digestive organs the vigor of which they are robbed. No doctor's stuff can supply the natural forces which only the vital chemistry of the living body can create. Like intoxicating spirits, dyspeptic medicines may, for the moment, exhilarate a patient, and make him feel great things; but, afterwards, they each make the troubles greater than before.

Beware of tea and toast, and such like diet, as remedies for dyspepsia. These do but impose unreasonable tasks upon impaired digestion. What is wanted is exactly the opposite *regimen*, namely, food that is small in bulk, and rich in substantial nutrient: something which, with the least exertion of power, the stomach can turn into rich blood to relieve the poverty of the fluids. Rare beef-steak, for instance, not fried in a pan of fat and sole-leathered, but quickly embrowned on a gridiron, and served up with the oozing juices of red life; and if fluid accompaniment is desired, let us try port wine, weakened to suit the strength of the organs, but rather reduced in quantity than watered much.

Bran-bread is of no account in this disease. It is excellent for constipation, if used now and then, but not continuously. We must discriminate between these complaints. In constipation, often, the digestion is even super-excellent, and the torpor of the bowels, which occasions the trouble, is due to the too thorough absorption of the liquid parts of our food, leaving a residuum too dry and rigid to be freely moved forward through the curvatures of the lower bowels. The most distressing affliction grows out of the impaction of matter in the colon from this cause, giving dull pains, which banish sleep and good humor. Pills are not the remedy for this distress, but tepid or cold water injections, which readily reach the colon, and by supplying moisture, bring away the obstruction. This treatment, though not a cure but a temporary relief, secures from distension of the bowel, which weakens its muscular power and promotes costiveness; and it also prevents it by dislodging, frequently, remnants which often lie impeded in the colon for years, causing all sorts of distressing feelings.—*Scientific American.*

YIELD OF CREAM AND MILK.—The *Agricultural Gazette*, in reply to an inquiry, says: Cream is generally 10 per cent. of milk, and butter 1lb in 21 pints of milk; an average yearly yield of milk is 550 to 600 gallons per cow." We should like to have the opinions of some of our dairymen on these points.

HOW LIGHTNING RODS SHOULD BE MADE.—The editor of the New York *Tribune*, having, in reply to a correspondent, raised its potent voice against lightning rods, the *Scientific American* sets him right on the question as follows: So far as the science of the question is concerned, our contemporary (the *Tribune*) is evidently out of his sphere; he does not know the nature of a lightning rod. Its function is simply that of a conductor, not of an attractor. It is carried up to such an elevation above the building that it may take the electric cloud, and conduct it silently to the earth, in order to prevent it striking the non-conducting part of the building. To do this perfectly, it must be continuous from point to base, and form a perfect connection with the moist earth below. If this connection is not perfect, of course the rod cannot perform the functions of a conductor, and so a disruptive discharge may take place.—There is abundant evidence for concluding that all houses which have been struck with lightning, when furnished with rods, have had their conductors imperfectly connected, either in the sections of the rod or in the earth. The rod should extend down several feet in the ground, and have a large plate or bar of metal at the base, according to the arrangement of the electric circuits at all telegraph stations. If a house is built on a dry and sandy situation, it is all the more necessary to be careful in extending the conductor deep into the earth, where it will meet with moist soil. If all lightning rods of the common size were thus carefully put up, we would seldom hear of such cases as the one referred to. (The case referred to, was one in which a house, furnished with a rod, was struck by lightning).

COLIC IN HORSES.—I will give you a receipt which I have known to cure in a few minutes. I knew a horse taken with it on a tread wheel to a carding machine, so that the owner thought he could not live. He got the veterinary surgeons, and they did what they could, and all decided that the horse must die. The man's wife, who believed and practised hygiene, from the time the horse was taken, tried to persuade her husband to use a wet bandage, but he insisted it would do no good. After all had given up that the horse could not live, by her entreaties—the doctors saying it could do no good or hurt—he took a thick bed comforter, bound it around the horse, went to the well and drew water, and poured it on till thoroughly soaked. It seemed like a pot boiling. In less than fifteen minutes from the time he commenced the watering process, the horse was up and eating, to the great surprise of the horse-doctors, who knew it could not live. The horse did good service afterwards. This receipt I gave several years ago, and it was copied into most, as I was told by an editor, of the agricultural, and many other papers in the United States. Many have tried and proved it. Try it, brother farmers.—*Farmers' Advocate.*

DIPHTHERIA.—The diagnostic by which it is known from other complaints of the throat is the formation of a membrane which increases gradually until the patient is literally strangled to death. It is sometimes accompanied by ulceration and extreme prostration of the entire system, and at others by neither of these symptoms, yet in either case it is equally fatal. To arrest the formation of this membrane would therefore seem equivalent to curing the dis-

ease, and this, in most instances, may be done in the following manner: In the early stages of the complaint, which is always accompanied by a soreness and swelling of the throat, let the patient use a simple solution of salt and water, as a gargle, every fifteen minutes. At the same time, moisten a piece of flannel, with a solution of the same kind, made warm as the patient can bear it, and bind it around his throat, renewing it as often as the gargle is administered, and in the mean while sprinkling fine salt between the flannel and the neck. Use inwardly some tonic or stimulant, either separately, or if the prostration be great, use both together. The treatment, as may be seen, is extremely simple, and if used in the earlier stages of the disease, will effect a complete cure.

A CURE FOR GLANDERS.—As it may be of service to some people, I just give you an account of a cure I made of glanders a few years back. My horse was a valuable one, and had had the glanders some 12 or 18 months, and so badly did he have it, that I offered to sell him for \$15. He could be heard to breathe from fifty to one hundred yards every breath; indeed, we could not sleep well, so distressing was his breathing, the stable being close by. I determined to kill or cure, so for experiment: On Monday, I gave him as much dry calomel as would lay on a ten cent piece; on Wednesday, I did the same; on Friday, I gave it again; on Saturday, he could not bite a pumpkin; on Sabbath morning, I looked in his trough, and found at least one quart of old matter scales, with a mixture of matter, all in a lump.—From that time he breathed easy, and never was troubled again with glanders; it was a perfect cure. I worked him in my buggy for two years after, and traded him as a sound horse to a neighbor, who was familiar with his disease all the time he had it. He was slightly salivated—was as good as before. A neighbor tried the remedy with equal success.—*Cor. Cotton Planter.*

TO PREPARE TURNIP SEED.—A correspondent of the *Rural American* gives the following, which he says is an English mode, which he has proved in this country:

To prepare the seed before sowing, take a dish that is large enough to hold all the seed that is intended to be sown, and turn on enough of new milk to cover the seed; let it soak six hours, then drain it dry; take sulphur, and put on a good quantity, mixing it thoroughly before sowing; the milk causes the sulphur to adhere to the seed, and as the seed vegetates, the strength of the sulphur so impregnates the young plant, that the turnip fly will not molest it.

ARTIFICIAL FISH BREEDING.—This is becoming to be quite a business in some portions of our country, and we do not see why it should not prove successful. A Mr. Kellogg, of Hartford, Conn., has already, in the course of his experiments, succeeded in producing, by artificial means, over 1000 trout, which are now doing well. He has lately sailed for France to procure further information from the great fish-breeders of that country. On his return he will be joined in the business by Col. Colt, of pistol notoriety.

WARM, well ventilated barns, pay good interest on the cost of construction.

Horticultural and Pomological.

WILLIAM SUMMER, EDITOR.

MONTHLY TALK WITH OUR READERS.

In the vegetable garden the same work may be continued as in the last. If you have any early cabbage plants remaining, set them out; they will come in early for use the next spring. Give the ground plenty of manure, as there is no crop that requires manure more than cabbage. If you have omitted sowing Spinach, for winter and early spring use, that sown last month should be thinned out and hoed, so as to leave the plants standing single, four or five inches apart. Where this is attended to they always produce broad and thick leaves.

Celery.—Take advantage of a fine day and earth, such as celery requires; let the earth be well drawn up to the plants, and within six or eight inches of the top. Attend to this occasionally; it will not only promote the blanching, but advance the growth.

Lettuce should now be hoed, and the surface of the ground kept loose.

Asparagus.—Give your asparagus beds their winter dressing. Clean all the stalks off by cutting close to the ground, and the weeds and litter, if any be taken off, and with the fork dress the ground three or four inches deep, and draw off, with a rake, an inch of the soil, and let the earth be left smooth.—Spread on some well decomposed manure, three inches thick, and cover this with good garden soil, and the earth taken off the bed; rake all smooth.—By this management, your asparagus beds will be dry and warm during winter, and produce fine, large buds in spring. To this treatment, you can add, during winter, a top-dressing of *salt*, which is a specific for this plant.

Strawberries.—If you have neglected, last month, to prepare for strawberries, do not lose any further time, this month. The plants will soon take root, and will acquire sufficient strength to bear a very good crop in spring. Remember, in making preparation for this crop, that the land must be prepared deep and thorough, to withstand drought in spring. Look to your old beds, and remove all the dead runners and leaves, as well as all useless plants, where too thick. Fork up thoroughly, and loosen the earth about the plant, and enrich with good mould or well rotten manure, which will give you good crops. In January, we usually give a light dressing of super-phosphate, which has always produced large crops of fine fruit.

The *Orchard* will now claim attention, and the end of this month all kinds of fruit-trees may be planted with good success. In a climate like ours, so favor-

able to all kinds of fruits, every homestead should be surrounded with every comfort in the way of fine fruit; first the strawberry, then sweet and delicious cherries, which are followed by apricots, early plums, and May and June apples, with a regular succession of peaches and pears, which now continue until frost, and with the late Southern varieties of apples, which may be kept until spring, surely every one is encouraged to plant an orchard. The many choice varieties of the pear, which succeed so well, and attain even greater perfection than in Europe and the North, now that they may be fruited early and abundantly, when propagated upon the Angers quince, should give an increased interest to this wholesome and pleasant fruit.

A home thus improved will elevate the taste, and endear its occupants to the chosen spot, around which cling so many fond recollections; and will make your children wiser and better, for having grown up under such wholesome influence.

MRS. RION'S SOUTHERN FLORIST.

Published by PETER B. GLASS, Columbia, S. C.; 1860.

Here we have a work which should be in the hands of every lady of the South. It is plainly written, in such style as to be entirely comprehensible, and contains most valuable instructions, relative to the cultivation and preservation of the beautiful and charming occupants of our gardens and pleasure grounds. We had no manual for our latitude, no book which the Southern lady could refer to, and be certain the information was to be relied on. This neat little volume fills up the gap in our floral literature, and the want will be no longer felt. Ample directions for the preparation of the garden, garden hedges, transplanting, seed-sowing, watering, &c., introduce the volume to the reader, with instructive and graceful pages. Mrs. RION avoids technicalities, and gives the common and accepted names of plants and trees. We wish she had followed this, and not have committed so great an error, as to call the Deodar Cedar "*Deodar Cypress*." This beautiful and proud oriental has never, to our knowledge, been called a cypress. Although it is called Deodar Cedar, it is very closely allied to the tribe of pines, and hence should be classed with the *Abies*. But this variety, and its congener, the *Cedar of Lebanon*, have been so long called Cedars, that we should stick to the common name. Such innovations ultimately do harm, even to the reader not skilled in botanical science; and we hope to see the error corrected, in a future edition of this extremely pleasant book. We consider this only as the forerunner of other contributions to floral literature, from the graceful pen of the authoress. She should plume her pen for wider fields, and in following out the everyday suggestions

which her garden pets thrust upon her, she will always make pleasant and instructive pages for the ladies of the South.

DEW AND FROST.

All bodies are constantly radiating some heat, and if an equal amount is not returned by others, they grow colder, like the Thermometer before the lump of ice. Hence the reason that on clear, frosty nights, objects at the surface of the earth become colder than the air that surrounds them. The heat is radiated into the clear space above without being returned; plants, stones, and the soil, thus become cooled down below freezing, and coming in contact with the moisture of the air, it condenses on them, and forms *dew*, or freezes into *white frost*. Clouds return or prevent the passage of the heat that is radiated, which is the reason there are no night frosts in cloudy weather. A very thin covering, by intercepting the radiated heat, will often prevent serious injury to tender plants. Even a sheet of thin muslin, stretched on pegs, over garden vegetables or tender plants, has afforded sufficient protection, when those around were destroyed.

On hills, where the wind blows freely, it tends to restore to plants the heat lost by radiation, which is the reason that hills are not so liable to sharp frosts as still valleys. When the air is cooled it becomes heavier, and, rolling down the sides of the valleys, forms a lake of cold air at the bottom. This adds to the liability of frost in low places. The coldness is frequently still further increased by the dark and porous nature of the soil in low places, radiating heat faster to the clear sky, than the more compact upland soil. A knowledge of these properties teaches us the importance of selecting elevated places for fruit trees, and all crops liable to be cut off by frost.

THE HERBEMONT MADEIRA GRAPE.

The following letter from the late Maj. JAMES S. GUIGNARD, relative to the introduction of this Grape, will be of interest at this time, when Grape culture is exciting considerable attention. We are convinced, however, that our friend, H. W. RAVENEL, Esq., who is distinguished for his correct botanical knowledge, is correct in the opinion that this variety is a native Grape, even with the reiterated expression, that it is a foreign variety. The correct botanical analysis of a plant must be true, and we are greatly indebted to Mr. R. for his botanical researches and labors in this and other matters. The letter of Maj. GUIGNARD proves clearly that this Grape was introduced long before it was known in Georgia:

Having read the Report of the Newberry Agricultural Society, and finding that an error has been committed, in styling the Grape called "Herbemont's

Madeira," a native Grape, I have thought it would not be amiss to give you the history or origin of the same. That Grape was introduced into Columbia in the year 1792, by my father and Benjamin Waring, who brought the cuttings from Gen. Huger's place, on the Wateree River, and which, with two other varieties, were called *English Grapes*, said to have been imported by Gen. Huger. Mr. Waring introduced the culture of them long before Mr. Nicholas Herbemont came to this State. He planted some acres of them in this Town, and attempted to make wine in 1799, but not succeeding, he gave it up. It is the same Grape that is called in Georgia the "Warren" or "Warrenton Grape." Cuttings were sent me, about thirteen years ago, by Mr. John McCall, of Georgia, who assured me that they were from original stocks, imported by himself, direct from Madeira. I have had the same Grape from Mr. Peter Swan, a French gentleman, (connected with M. Antonio, formerly a merchant of this Town,) who said he imported them. Also, the same Grape, from Gen. Robert Y. Hayne, by the name of "Burgundy," which, he said, came from Europe.

I have no doubt, therefore, that it is a foreign Grape, and not a native. It certainly ranks among the best, either for table or wine, and in some situations does not rot.

Respectfully, Yours, &c.,

JAMES S. GUIGNARD.

Columbia, S. C., Sept. 25th, 1843.

For the Farmer and Planter.

VISIT TO THE POMARIA NURSERIES.

MR. STOKES:—At a trip on the Greenville Railroad, from Columbia to Ninety-six Depot, we stopped at Pomaria, to spend a day with our friend, Mr. Wm. Summer, on purpose to look through his Nurseries. By being informed before, Mr. S. met us, with his carriage, at the Depot, and after a few moments pleasant ride, we arrived at his residence, which is about $1\frac{1}{2}$ miles south of Pomaria. After a good dinner, we commenced our pleasant task. His Nurseries, located near his dwellings, which justly deserves the reputation it enjoys, of being one of the best kept "establishments" of that kind in the South, is, indeed, a model of neatness and beauty.

The soil is gravelly, and was rather poor, but dry, and is made rich by deep trenching, and heavy dressings of peat, compost, and manure. It is just the right spot of ground for its purpose, for the young shoots have, in such ground, good chances to ripen firmly; and we observed, that the wood of the different varieties of trees and shrubs are already nearly ripe at present. It will then be of no danger for the patrons of Mr. S. to get trees or plants with unripe wood, which will be either killed by the first severe

frost, or destroyed by mildew, during the next summer—a fault so common to Northern trees.

The Nurseries contains about 35 acres—all are brim-full with trees and plants. In search of fruit-trees, we found what we wanted: good, strong, young specimens, well cut bark, budded or grafted low, and on sound stocks, all grown in natural soil, and not forced. Among his 500 propagated varieties of apples, are at least 300 kinds Southern seedlings. Among others, is ready to ship out, next winter, the new South Carolina Seedling Apple, which took the first premium at our last State Fair, as the best Southern winter apple, which has been named "Susannah," in honor to the lady that raised it. Everybody, during our last Fair, that saw a specimen of this variety, could not help but admire it. Who now wants to secure this splendid kind for their orchards, will do well to let Mr. S. soon know, for he told us that the 400 trees, which only could be propagated last winter, are already half engaged. It will be remembered that it took the prize contending against twenty-two North Carolina varieties.

Among his Pears are two new South Carolina seedlings. "Upper Crust," an early variety, which bears an abundant crop every year, and "Dr. Baehman," called so to honor our old worthy friend, Rev. Dr. John Baehman, is one of the very best of Pears, ripening about the end of August, with a rich vinous flavor. Mr. S. has about 600 varieties, propagated through Pear and Angers Quince stocks. All are sound and large trees, well trained, and if carefully planted, must give entire satisfaction.

The Peaches are thrifty and large, well grown, and one year from bud. His 400 propagated varieties embrace the very best sorts yet tested, from the very earliest to the latest. Many of them, and very good sorts too, are natives of the Palmetto State.

The Nectarines, Apricots, Plums and Cherries, are all handsome, fine, strong, and healthy "stuff," in nurserymen's phrase; and Chesnuts, English Walnuts, and Pean nuts, are propagated in such a large quantity, that most every husband in this State, who wants, has a chance to get some, to plant and raise nuts for his children to crack during Christmas time.

Mr. S. has also very largely grown the Herbemont Everbearing Mulberry, which, he says, is far superior to Downing's Everbearing; for it is very hardy, bears abundantly and regular, and its fruit is very palatable. It is the greatest food for hogs; who wants to raise them, and plenty of poultry also, should have a few trees planted in his yard.

How many thousand Grape-vines Mr. S. has, ready for sale, we do not undertake to say, but no more than the population of our State ought to want.—There are large squares of all the principal old tested native varieties, grown from layers or cuttings; all

large and fine plants, with strong, well ripened wood; and the new varieties, such as Delaware, Diana, Concord, Anna, Hartford Prolific, To-Kalon, Union Village, Rebeeca, and others, are all plentiful on hand. He has also propagated, in open air, a fine selection of the principal and best foreign kinds.

The Ornamental Department, at the Pomaria Nurseries, is unrivaled, and the largest and best in the South, and shows of Mr. S.'s good judgment and fine taste. It is not possible for me to say much about it, for it would require the whole space of your paper, to give a full description of the various evergreen and deciduous trees and shrubs. I refer, in this part, to Mr. S.'s New Descriptive Catalogue, which, he said, will be out in a short time. I only say, Mr. S. has a very large variety of beautiful and well grown Ornamental Trees and Shrubs, which will make our bare city, village, and country gardens, by a little expense and labor, beloved "spots of Eden."

He has, also, the largest and finest selection of the much admired Roses and Dahlias, I have ever seen. His 300 varieties of Dahlia we found all in full bloom; all shapes and shades of color are united in them; there in a little spot of about $1\frac{1}{2}$ acres; to see only this beauty of nature, is alone worth a trip to the Nurseries, for every lover of flowers. His Rose Department numbers nearly 800 varieties, which, with exception of the very newest kinds, are all propagated by cuttings; and his budded plants have already made heads strong enough to throw up all the sap which the root furnishes, and there will be no danger that they will sucker much, whoever gets them.

In the Garden, the Roses, with all their fresh, autumnal beauty, are in the greatest perfection; while the Dahlias, with their varied and rich, dazzling colors, make everything look gay and lively. The Crysanthemums, too, with their rich, but modest tints, lends many a charm to autumn and "light pale October on his way, as he glides into the lap of winter." They serve, with the Rose, to make the most beautiful bouquets, and, withal, are of such easy culture, that no garden should be without them.

But I must close, for I think I have put your patience to a hard task; and otherwise, it was getting too dark, to make any further observations. How I did enjoy my supper, Mr. S.'s pleasant conversation, during the rest of the evening, and my night's repose, you may imagine yourself.

After the next morning's breakfast, I walked through Mr. Summer's standard Orchards, numbering at present nearly 800 varieties of Pears, 600 of Peaches, and 600 of Apples. As a great lover of good fruit, I tasted many fine kinds. With my carpet-bag full of Apples and Peaches, I parted from my liberal host, and, after a few hour's ride, arrived safe home, very well pleased and satisfied, and profited from my visit.

A SUBSCRIBER.

PLANTINE ORCHARDS.

We extract the following beautiful appeal from one of our exchanges, and would gladly encourage a taste for the *beautiful* and the *useful*, and in no way can so much be effected as by extending the cultivation of fruit of every description. It adds to the comforts and endearments of home, and exerts a wholesome moral and physical influence upon the young; at the same time, by beautifying the home-stead, a charm is added to rural life, which will grow up and mould the man in after life for good:

"Who plants fruit trees makes a permanent investment, that may be expected to increase from year to year, until their original value is hundred-folded. Who plants fruit trees makes a prudent provision against life's rainy days, against loss of health, misfortune in business, old age. Who plants a tree, extracts something of bitterness from the original curse. It was a part of Adam's punishment, to be expelled from the society of cultivated trees; to surround oneself with them, is to take some steps towards regaining the Paradise that was lost to man by his first transgression. The planted fruit tree will be a faithful minister to its owner's profit, improvement, health and happiness. It will stand sentinel over his dwelling through winters of adversity, when summer friends have fled. While its master is sleeping, the tree will be growing. While he is traveling, the tree will stay at home, and keep on growing. It will be industrious for him through all seasons, converting air, and earth, and water into shadow for his footsteps, perfume for his parlor, food for his table, fuel for his hearth, timber for his use. It will serve him contentedly through life, and minister to his wants when its life is ended. A tree has moral and social uses. It is an orthodox, wholesome preacher. It will discourse daily homilies on faith, hope, patience, and good will to men, with a gentle eloquence that steals into the heart, making it more roomy and open, and filling all its chambers with sunshine. A tree sets an example of self-denying benevolence. It embroiders its foliage, and ripens its fruit by tedious processes; then gives them all away, dropping its last leaf to keep warm the tender plant that has taken root in its shade. The poet Virgil discovers a close relation between generous character and generous fruit trees; his native land he celebrates as a 'mighty parent of fruit, mighty parent of heroes.' Children should have a double share of depravity, not to be made better by the kindly influences that distil about them, when they are brought up in the companionship of grand and elevating trees. Would a man rear a monument to his memory more to be envied than one of costliest marble, let him plant trees; they will sing his praise in measures sweeter than a poet's, when no envious lips are there to detract."

VINE-GROWER'S CONVENTION.

(CONCLUDED.)

AIKEN, Wednesday, Aug. 22, 1860.

Dr. Cook complimented the learned Professor for his address, and moved a vote of thanks to the Doctor, which was unanimously adopted by the Convention.

Col. Yeadon informed the Convention that Prof.

Hume's report had attracted the attention of commercial gentlemen in New York, and he had been informed that they had addressed him a circular letter on the subject.

Dr. Hume, in reply, stated that Wine Merchants in New York had tendered him an agency to buy up every gallon of Wine manufactured from the pure juice of the grape, within the State of South Carolina.

The Chair again called for reports from Committees.

Mr. Ladson, Chairman of the Committee on Wine, reported, that more time than had been allotted, was required for the trial of so many samples, but, nevertheless, in the exercise of its best judgment and taste, the following opinions of the quality of each variety are now expressed, viz :

1. One bottle from J. L. Moultrie, of Union Springs, Alabama, marked "Catawba, 1855." A good cordial or sweet Wine, probably made with a large admixture of sugar.
2. One bottle from Dr. Wylie, of Chester, S. C., marked "Light Red Scuppernong." A pleasant, sweet Wine.
3. One bottle from the same, marked "Dark Red Scuppernong." A good flavored cordial.
4. Two bottles from Hon. J. H. Hammond of South Carolina, marked "Catawba." A sound, dry Wine, and free from acid; the second bottle rather better than the first.
5. One bottle from Mrs. Wilkinson, of Kalmia, S. C., marked "Bland's Madeira." A very pleasant, heavy Wine—very palatable.
6. One bottle made by Col. Harazthy, presented by Gov. Hammond, marked "California Red Wine." An astringent Wine of very good quality.
7. One bottle from A. DeCaradeuc. A light must; will make a good Wine.
8. One bottle from A. C. Hedge, of Lexington, N. C., marked "Pure Isabella." A good cordial or sweet Wine.
9. One bottle from the same, marked "Pure Catawba." Too sweet.
10. One bottle from the same, marked "Elsenburg." Another sweet Wine; no doubt both made with a large admixture of sugar.
11. One bottle from Dr. G. S. Woodruff, of Gadsden, S. C., marked "Hume's Aleohol method, Sparkling Wine, 1860." A delicate Wine, but resembling Cider.
12. Three bottles from P. W. Printup, of Union Point, Ga., marked "Catawba, 1859." A fair, astringent Wine.
13. Two bottles from Fleming & Nelson, of Augusta, marked "Catawba, without sugar." A fair, light Wine; very pleasant, and free from acidity.
14. One bottle from W. S. Walker, of Aiken, S. C., marked "1858." A fair Wine, but inferior to some of the others.
15. One bottle from Wm. G. Mood, of Aiken, S. C., marked "1858." Very much of the same character as the last, but less acid.
16. One bottle from the same, marked "Catawba, 1858." A better Wine than Cincinnati Catawba.
17. One bottle from — Wynne, of Washington, Wilkes Co., Ga., marked "Dry Catawba." A very good Wine.
18. One bottle from Dr. J. W. McDonald, Aiken, S. C., marked "Warren Wine, Vintage 1859."—Rather acid.

19. One bottle from the same, marked "Lenoir Port, 1859." More like Claret than Port; too acid.

20. One bottle from the same, marked "Pauline Wine, 1859." A Dry Wine, of good quality; free from acidity.

21. One bottle from the same, marked "Isabella, 1858." A fair Claret Wine, but rather acid.

22. One bottle from James Gardner, Augusta, Ga., marked "Bullace Wine." A Wine Cordial.

23. One bottle from C. G. Sutton, of Clarksville, Ga., made from the "Vitis Labrusca, or Wild Fox Grape, 1859." Both sweet and acid.

The Committee rejoice to notice a disposition on the part of our people to make their own Wine, and are confident, from the samples furnished, that the just medium between sweet and sour will soon be obtained. A Wine Merchant is, however, required, in whose cellars the different Wines can be classified and improved, as a Wine taste will dictate, and who, after a period of years, not less than five, would then offer them for sale. This will require capital, but, doubtless, when the supply becomes more ample, that will not be wanted. All of which is respectfully submitted. Signed by James H. Ladson, in behalf of the Committee. Aiken, 22d August, 1860.

On motion of Mr. Schley, of Georgia, the report was received.

The Chairman of the Committee on Grapes, stated that they required more time in which to perform their arduous duties, and that if their undivided attention was required to examine and report to this Convention, it would deprive them of the privilege and pleasure of attending its sessions, which were exceedingly interesting. They therefore asked the permission of the Convention, in conformity to the resolution under which they were appointed, to report at a future date. Granted.

Dr. Hackworth, of Alabama, stated that he was asked by neighbors if he intended to attend the Vine-Growing Convention of South Carolina, according to appointment. He answered yes. They asked what was the use—it would cost him \$100 at least, without an equivalent. He said he would try it, anyhow. He was glad he had come; he had been both instructed and pleased. The exhibition before this Convention was of itself a triumph. He would not have missed this Convention for \$200. That he intended, if able, to attend the next Convention. It showed him what had been done, and how much can still be done.

Mr. DeCaradeuc, of South Carolina, introduced the following resolutions, viz:

That this Convention earnestly recommend to the Wine-growers of the United States, to adopt a uniform system of naming and labeling their Wines, according to the universally received plan of taking, for general appellation, the name of the State wherein made; then the special name of the neighboring town or river, and lastly, the private name or brand of each manufacturer.

Whereas, It appearing to our satisfaction, that the taste of a great majority of our people demand a full bodied Wine, resembling Madeira or Sherry, or a Sweet Wine, any of which cannot be made without an addition of Spirits of Sugar, and in order, as much as possible, to prevent the adulteration of our Wines, when thrown upon the market, be it, therefore,

Resolved, That a moderate addition of Brandy to the must, or a concentration of grape sugar, by des-

iccation of the fruit, or other means, is both proper and judicious, and, in the opinion of this Convention, is not, and cannot be considered, as an adulteration of the Wine.

Mr. DeCaradeuc, in advocacy of these resolutions, read the following argument, viz: I have always advocated the making of our Wines from the pure juice of the grape, as the plan calculated to give us the highest degree of excellence and delicacy. This is still my opinion, unaltered by some years of experience. Several of our grapes, when thoroughly ripe, possess qualities which, without the addition of any substance whatever to the juice, will produce Wines equal to some of the best from European vineyards. So they have been pronounced by men of undoubted authority. But these men are, unfortunately, ahead of the times; and it would seem that a vast majority of consumers associate with the idea of Wine more sweetness and more strength than can be naturally imparted by the grape in our or any other climate. If a Wine be dry and mild, it is called sour, although a chemist may not detect a trace of vinegar in it; add a little sugar and some Brandy, it is then prime.

The question now before us is, whether it be the policy of the producer to preserve the juice perfectly pure, and wait until the taste of the consumer can be brought to relish a light and delicate beverage; or, by an addition of Alcohol or sugar, to furnish to the public one more suited to their palate. I have come to the conclusion that it is injudicious to follow exclusively the first plan. It is true that Wines made upon the pure principle, have heretofore been in great demand, and that the supply has not kept pace with the demand. But we must look forward to a vast increase of this supply, and if we wish to find sale for this, we must add Brandy, or concentrate the grape sugar. You are all aware that there are houses in Boston, New York, Philadelphia, and other cities, engaged in manufacturing ostensibly with green and half decayed wild grapes, Wines whose only qualities consist in sweetness, strength and color, neither of which could be imparted by the small proportion of impure grape juice, and yet this stuff is readily sold at highly remunerating prices. It is no doubt consoling to know that we are not singular in this respect, and that our neighbors over in England are no better than we are, in proof of which I will beg leave to quote from an old letter, written to some wealthy merchants in London, by a Portuguese company, formed to monopolize the sale and preserve the great reputation of Port Wine: "You know that the first-rate Wines of the factory had become excellent, but you wished it to exceed the limits which nature had assigned it, and that, when drank, it should feel like liquid fire in the stomach; that it should burn like inflamed gun-powder; that it should have the tint of ink; that it should be like the sugar of Brazil in sweetness, and like the spices of India in aromatic flavor. You began by recommending, by way of secret, that it was proper to dash it with Brandy in the fermentation to give it strength, and with alder-berries or logwood to give it color, and with alum or oak-bark to give it astringency.—And as the person who used the prescription found the Wine increase in price, and you still complained of a want of strength, color, and maturity, in the article supplied, the recipe was propagated until the Wines became a mere confusion of mixtures."

Such is the state in which this Wine, so highly

prized by Americans and Englishmen, leave the shores of Portugal. What changes it undergoes afterwards no one can tell; but I think I would not be far wide of the mark were I to assert that 99-100ths of what is sold for Port, has never been contained within the pulp of a grape. This is adulteration, in the worse sense of the word, and should be condemned by law as well as by public opinion.

Let us now consider the other Wines mostly valued in this country, Madeira, Sherry and Champagne.

Madeira is strongly brandied after the first fermentation, and again before being shipped for exportation, which double addition renders it, when new, of half the strength of ordinary Brandy; the smell of it partakes so strongly as scarcely to be recognized by that sense alone.

When Sherry is made, a portion of the fresh juice or must is preserved from fermentation, by the addition of at least one-third Brandy; and this sirupy mixture, which is called arrope, is subsequently added at the rate of one gallon to every four to the Wine, after it has undergone its first fermentation, thus giving it, at the same time, additional grape, sugar and Brandy; and this method I would be inclined to think the best for increasing the body of the Wine without injury to its flavor. Both Sherry and Madeira are very harsh when new, and this is almost invariably the case with all good Wines.

Champagne is probably more drank than either of the preceding Wines, and is very generally liked, excepting perhaps by such as affect a blaze taste, and prefer whisky. But this flavor is more attributable to its sweetness and effervesence than to its exquisite delicacy and perfume, for how many do we hear say, they hold sweet cider in equal estimation! A fact easily believed, when we take into consideration the quantity of New England Champagne consumed by persons who firmly believe it to be direct from the shores of the Marne.

Now if we consider the pure juice dry Wines, held in the highest esteem on the continent of Europe, we will find them comparatively little drank in England, and still less in America. Take, for instance, the Rhenish Wines: few persons in this country like them, and very few indeed would take a second glass were it not for their renown. Why, the real Johannisberger, one of the most celebrated Wines of the world, mostly kept for Kings and Princes, is so sour that it is almost like vinegar and water, and no stronger than our mildest Wines, and yet what reputation it enjoys in Europe; but take its name from it, it would rank very low in this country.

The Bordeaux Wines are somewhat more used, perhaps, on account of a moderate addition of Brandy, before exportation; and I doubt whether nine-tenths of the people here would not prefer newly made sweet Scuppernong or Bullace Wine, or Blackberry Wine, or Currant Wine, or Gooseberry Wine. Thus it would seem that Wines made upon the pure juice principle, although highly prized on the continent of Europe, are held in very little esteem by the mass of our people, who prefer a full bodied or a sweet Wine. It becomes evident from this that the greatest portion of our Wines must be made to suit the taste of the majority; and with such precedent before us as Madeira and Sherry, we can do so openly and without hesitation. Nor can this be called adulteration, or catering to a vitiated taste of the people. There is nothing unwholesome or impure in this proposed addition, which, by bringing native Wine more

into favor, will throw out of market much of the poisonous fabrication of large cities, and by gradually refining the palate, create a demand for lighter and more delicate kinds. It would, therefore, appear to me that a moderate addition of Brandy, or a concentration of grape sugar, such as that used for Sherry, is both proper and advisable. But, at the same time, I would recommend to Wine-growers, each year to make a butt or two of the pure juice for such as would give it the preference. Wines of the class of Bordeaux, Moselle and Hock, light, dry and cooling, are far more suitable to our Southern climate.

Mr. Gregg moved that Mr. DeCaradeuc's address be substituted for his resolutions.

Mr. Yeadon was in favor of retaining the resolutions. He asked if it was true that the people of this country preferred heavy to light Wines. He disclaims that it is an adulteration to add sugar or Brandy, if, as it has been asserted, the people prefer a Wine that has a body, rather than that of light Wines; and if that body cannot be given without the addition of Brandy, why not come out at once with the declaration, honestly and openly? Why suppress the truth? Dr. Hume has stated, as a chemist, that Alcohol is necessary to give body.—He has stated the fact that the Wines of this country have an excess of acidity from too great a proportion of the impure tartrate of potass. He lays stress upon the importance of preparing Wines that will meet the demands of commerce.

Mr. Schley, of Georgia, contended that the application of Alcohol was an adulteration; that if they were permitted to add it, they might, with equal propriety, add essential oils. Tastes differed, and with the diversity of tastes there would be necessarily, (if additions be allowed at all,) a diversity of admixtures.

Mr. Hart, of Georgia, occupied the same platform. He stated that if they reconciled it to their consciences to add Brandy, they might add oil of mint, or Juniper, or anything else.

Dr. Cook, of Beach Island, S. C., contended that if Wine contained Alcohol, the addition of more could not be an adulteration, because it was already one of the elements existing in Wine, and the same might be said of sugar. To adulterate, was to corrupt; to corrupt, was to add some foreign substance not entering into the composition of pure Wine.

Mr. Redmond, of Georgia, was in favor of correcting, if possible, the tendency to an excess of tartrate of potassium, either by cultivation of the Wine, i. e. manuring with chemical substances, that would counteract the tendency to generate this acid in excess, or by allowing the grapes to ripen more perfectly upon the vine before gathering. He urged that as fruit matured, the acid naturally evaporated, and saccharine juices became more concentrated. He was utterly opposed to adding distilled liquors of any kind. He urged that we should make Wine of the pure juice of the grape; that we should make them and consume them at home; that home consumption would be adequate to absorb all that can be manufactured, without shipping them to be adulterated elsewhere, and then returned to us at an enhanced price, leaving the cream of profits in the hands of rapacious fabricators of spurious Wines, and giving us, in return, poisonous concoctions, for the juice of the grape. He was opposed to the last resolution.

Mr. Rogers, of Alabama, followed in opposition to the addition of Alcohol or Brandy. Sugar, he thought, might be added with impunity, provided a good pure article of sugar was used, but not in excess, so as to render the Wine too sweet, or to excite too active fermentation; otherwise, he thought a moderate quantity of sugar would give body to the Wine.

Dr. Hackworth, of Alabama, spoke of additions of spirituous liquors as an adulteration. He differed from the gentlemen's definition (Dr. Cook), of the word "adulteration," as applicable to the subject under consideration. He contended the term should mean "adding any foreign agent." "The commingling of two separate bodies" was an "adulteration," notwithstanding these two separate agents these two separate bodies may be, and are, prepared from the grape—the one, however, by expression, the other by distillation. He hoped the Convention would not adopt Mr. DeCaradeuc's last resolution.—He stated that the addition of strong drink to make Wine reminded him of a fast man going into a bar-room and calling for a whisky-toddy, and, after drinking a part, by way of tasting, called for the Brandy bottle to give it strength, and for the Gin bottle to give it flavor, and for the Mint bottle to give it a relish, and for Schiedam Schnapps to make it spicy, when he only wanted a Whisky-toddy.

Mr. J. R. Rogers, of Hardaway, Alabama, moved that Mr. DeCaradeuc's second resolution be laid on the table. In defence of this motion he urged that this Convention should not permit the authority of its name to go forth to the world as recommending the manufacture of a supurious article, however individuals might lend their influence to get up for commerce such an article. He contended that a high responsibility rested upon this Convention, and that we should acquit ourselves as men feeling and acting up to these behests: that the addition of foreign or extraneous substances was an adulteration.

The President retired from the Chair, and Mr. Wm. Gregg was requested to occupy the same, temporarily.

Mr. Yeadon moved that the thanks of this Convention be unanimously tendered to the Hon. James H. Hammond, for the dignified and courteous manner in which he has presided over the deliberations of the Convention.

Also, that the thanks of this Convention be tendered to the Secretaries for the satisfactory manner in which they have discharged their duties.

Ex-Governor Hammond having returned, the Chair was vacated by Mr. Gregg, and resumed by the Chairman.

Mr. Gregg informed the President that in his absence a vote of thanks had been unanimously tendered him for the dignified and courteous manner in which he had presided over the deliberations of this body.

The President arose from his seat and responded to the sentiment expressed, by congratulating the Convention on the manner in which the proceedings had been carried out. There was no difficulty in presiding where gentlemen were associated; because each mutually respected the feelings of his associate. The discussions that had taken place in this body were highly edifying and instructive, and all expressed in the best spirit. He was very much pleased with the urbanity and courtesy generally

manifested. But he would take the liberty, in part, to dissent from some of the views expressed by the learned Professor. Science had a great deal to do with every element of husbandry as well as of art; nevertheless, there was to be found at times a want of perfect agreement between them. Science occasionally indicated one thing; husbandry and art another. Whether the agreement or otherwise is referable to a proper adaption of agencies, was a question he had neither time nor the inclination to discuss, nor is this the place. Of one thing, however, he was satisfied—modifications of grapes may and had been produced by culture. The varieties of grapes were extensive. In Luseburg garden there were not less than two thousand varieties alone.—Hence, when the chemist, by analysis, tells us the constituents of Wine, the practical husbandman by the test of experience, must devise the agencies best calculated to grow grapes, so as to modify conditions, indicated by analysis, when those conditions were either in excess or hurtful. He therefore was more hopeful of success than some others; for there was nothing easier in chemical science than to modify the presence of one agent by the introduction of another. The Doctor had told us of the presence of an excess of the impure tartrate of potass in such grapes and Wines, manufactured among us, as he had analyzed. But in the same breath he also told us they were immature and unripe grapes, or Wines from such grapes. How much this had to do with his results, is yet to be determined. He would recommend the next grapes we submit to his research be perfectly ripe, and when we learn the analyses of these we can then know more perfectly the true state of the case, and knowing these, can better lay out for our government a systematic course of experiments.

The fermentation of Wine is another point requiring minute attention, and should be noticed very carefully. Various opinions have been expressed on this point, in regard to manner. Some permit fermentation to take place in tubs or vats: others from a barrel with the bung out; some others cover the mouth of the bung with a cloth. Still others permit the gas to escape through a long syphon, which is inserted very carefully into the plug of the bung, and the bung securely closed down, at opposite end of the syphon, which should be curved up, and inserted in a large tub of water, so that gas escaping through the syphon from the barrel containing the Wine, will pass out through the water, and thus prevent the ingress of atmospheric air into the barrel of Wine.

Gentlemen, our Convention has been emphatically successful in all the elements that can give encouragement to an enterprise that deserves to be fostered. May you safely return home to the bosom of your families, and practically enforce the lessons here learned, in developing an enterprise that will not only enrich our common country, but contribute more to elevate the morals of the people by substituting a good, wholesome, pure beverage, than any other that can be devised.

On motion of Dr. Lartigue, the thanks of this Convention be and they are hereby tendered to the Baptists for the use of their Church, also to the Honorable the Town Council of Aiken for the use of their Hall for the exhibition of fruits.

On motion of Mr. Redmond the Convention now adjourned.

Domestic Economy, Recipes, &c.

TO PREVENT SKIPPERS IN HAMS.—In a communication to the *Cotton Planter*, Mr. W. McWillie says:

"There is, according to my experience, nothing easier than to avoid the skipper and all worms and bugs that usually infest and often destroy so much bacon. It is simply to keep your smoke-house dark, and the moth that deposits the egg will never enter it. For the past twenty-five years I have attended to this, and never have had my bacon troubled with any insect. I have now hanging in my smoke-house hams one, two, and three years old, and the oldest are as free from insects as when first hung up. I am not aware of other causes for the exemption of my bacon from insects, but simply the fact that my smoke-house is always kept dark. Before adopting this plan, I had tried many experiments, but always either without success or with injury to the flavor of my bacon. I smoke with green hickory; this is important, as the flavor of bacon is often utterly destroyed by smoking it with improper wood."

THE BEST TOMATO PICKLES.—Take one peck of green tomatoes, sliced, one dozen onions, sliced also, sprinkle them with salt, and let them stand until the next day, when drain them. Then use the following as spices: One box of mustard, one and a half ounces of black pepper, one ounce of whole cloves, one ounce of yellow mustard seed, one ounce of allspice. Put in the kettle a layer of spicess, and one of tomatoes and onions alternately. Cover them with vinegar, wet the mustard before putting it in; let the whole boil fifteen or twenty minutes, and you will have pickles so good that you will be pestered by all your friends and neighbors, asking you for a taste of them and a recipe.—*Ohio Cultivator*.

CURING HAMS.—At length the famous "Hewbold Recipe" for curing hams has been discovered. The old gentleman was very choice of his secret, and preserved it till the day of his death. After that event, the recipe was found hid away in a hole, in the cellar wall. Here it is: Seven pounds coarse salt, five pounds brown sugar, two ounces of pearl-ash, and four gallons of water. Boil all together and scum when cold. Put it on the meat. Hams remain in eight weeks, beef three weeks. The above is for one hundred pounds weight. The recipe is at least worth trying, and we hope some of our readers will test it.

TO FASTEN KNIFE HANDLES.—The *Chemical Gazette* says: When knives and forks have come off the handles from being carelessly put in hot water, or otherwise, a cement, made as follows, will be useful to re-fasten them: Take of gum shellac two parts, and prepared chalk one part; reduce them to powder, and mix thoroughly. Fill the opening in the handle with the mixture, heat the shank of the knife and press it in. Then keep the handles out of hot water.

FRUIT PIES.—A very little soda added to fruit, which is extremely sour, makes it more healthy, and saves sugar. Too much soda would make them flat, stale, and unpalatable. As much as will lay on a half-dime will do a pint.

VINEGAR PIE.—Three tablespoons of vinegar, a cup and-a-half water, one teacup of sugar. Heat it to boil, then stir in three tablespoons of flour previously wet with water; remove from the fire as soon as the flour is stirred in, not waiting for it to boil up again. Flavor with lemon or nutmeg, and bake with or without upper crusts, as suits your fancy.—A bit of butter may be added, if you wish a richer pie. This is a very good substitute for fruit.

PICKLING SWEET APPLES.—To one-half peck of sweet apples make a syrup of two pounds sugar, and one pint of vinegar. Boil the apples in this syrup until tender; then remove them, and make a new syrup of $2\frac{1}{2}$ lbs of sugar, and one pint of vinegar.—Add one teaspoonful of cloves, and one of cinnamon, tied in a bag. Let the syrup boil 15 or 20 minutes; then pour it, while hot, over the fruit. The first syrup is good for other sauces.

TO KEEP POTATOES IN THE CELLAR.—A correspondent of the *New England Farmer* says: "Put them in a pile as deep as you can conveniently. He has for three or four years noticed that where they were deepest they kept the best. Last autumn he put out 125 bushels in one bin, and filled $2\frac{1}{2}$ or 3 feet deep. They have decayed but little, and he found more rotten ones near the top than anywhere else."

GOOD BROWN BREAD.—Two quarts corn meal, two quarts shorts, one teacup molasses, one teaspoon of salt. Stew a squash or pumpkin in water enough to wet this mass; mash fine, and pour it boiling hot over the meal. Stir it well, and when cool enough, add a pint of yeast, and two quarts wheat flour.—This will make four loaves; when light, bake three hours.

SLOBBERING IN HORSES.—A correspondent of the *Boston Cultivator* cures this disease by the use of saltpetre. A tablespoonful to a dose, he has found to cure the first case he ever had, and has not found it necessary to give the fourth dose. He gives a tablespoonful in the morning, and in three days, if the horse is not free from it, repeats the dose.

RICE AND APPLES.—Core as many apples as will fill the dish; boil them in light syrup; prepare a quarter of a pound of rice, in milk, with sugar and salt; put some of the rice in the dish, and put in the apples, and fill up the interstices with rice, and bake it in the oven till it has a fine color.

TO REMOVE MILDEW FROM CLOTHING.—Take soap and make it thin enough to rub into the cloth well, then lay it in a hot sun for two or three days. If one application is not enough, wet it again. This is good for stains of any kind in white cloth.

COWS SORE TEATS.—First wash with castile soap and warm water, then apply lime water and linseed oil, mixed in equal parts.

REMEDY FOR TOOTHACHE.—Pulverize and mix equal quantities of alum and salt. Wet a small piece of cotton so the powder will adhere to it, and fill it into the tooth. It is said to be infallible.

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**Cotton, Wheat, Corn, Rye, and Oats Culture,
 Besides the various Root Crops, Gardens, &c.**

IN the autumn of 1857, we shipped Fifty Barrels RHODES' SUPER-PHOSPHATE to Rhett & Robson, of Charleston, with the view of introducing this manure for Cotton culture, we having previously ascertained this staple required largely of Phosphoric Acid, and the sections for this culture a *soluble manure*.

We subsequently induced Col. A. G. Sumner, of Pomaria, to experiment with *Ten Tons*, at our risk, a detailed report of which result was published in the *South Carolinian*, and afterwards in the *Farmer and Planter*.—The demand speedily increased, and the following year the sales were comparatively large. September, 1859, we addressed letters of enquiry to some eighty Planters, whose address was furnished us by Rhett & Robson; quite a number responded, and the most of them were met by Mr. Rhodes during the exhibition of your State Agricultural Society, at Columbia.

While a very largo proportion felt warranted in speaking in terms of high commendation, there were some who referred to their experiments with disappointment—attributing to various causes, drought, plowing too deep, &c. The result has been, that during the autumn and winter of 1859, we supplied our different agencies, near

20,000 Barrels

for Cotton culture, creating a demand which has compelled us to greatly enlarge our manufacturing facilities.

The object we aim to accomplish is, to ESTABLISH a STANDARD for SOLUBLE Phosphoric Acid—the nourishing property of plants; there being, as all know, a standard for Ammonia—the stimulating property—in dry Peruvian Guano; (Cotton seed yielding Potash.)

We also urge upon Planters to make their own combinations from these Standard Ingredients, and not to resort to them until they have exhausted their stock of compost manures, but use them as adjuncts.

It may not be inappropriate for us to add, that "Rhodes' Manure" is manufactured under the immediate supervision of the eminent manufacturing Chemists, POTTS & KLETT, who, with ourselves, feel full responsibility to the Planters of the United States. These gentlemen have placed in the hands of Rhett & Robson a binding legal GUARANTEE of "purity and freedom from all adulteration in the Rhodes' Manure."

We also authorize the obtaining of samples of

Rhodes' Super-Phosphate;

same known to have come from ourselves or through our accredited Agents, which can be placed in the hands of competent Chemists for complete analysis; and should the result of their determinations disclose anything but STANDARD of best SUPER-PHOSPHATE, we will pay the fee of examination, and authorize such public use as the party may elect.

Prof. Joseph Jones, of Augusta, Georgia, Chemist to the "Cotton Planters Convention," who made critical examination from a very large stock in hands of J. A. Ansley & Co., Augusta, and Patten & Miller, Savannah, in an elaborate Report to Hon. Howell Cobb, President of the Convention, pronounced "Rhodes' Manure of uniform commercial value." Prof. Jones has also accepted an invitation to visit the WORKS for inspection, the result of which he will include in his report to the Convention which will assemble at Macon, Ga., December next, and which, we hope, may prove satisfactory to Planters.

We respectfully refer to our sole Agents for South Carolina,

**RHETT & ROBSON,
 Charleston,**

who will have ample stock of Rhodes' Manure on hand at all times, which they will furnish in desired quantities.

B. M. RHODES & Co.,
 Office 82 Bowly's Wharf, Baltimore.

NEW MUSIC STORE, COLUMBIA, S. C.

THE undersigned respectfully informs the public that he has opened a MUSICAL WAREHOUSE in the store on Richardson Street formerly known as DOUGAL'S Shoe Store, where he intends keeping a large and varied stock of MUSICAL MERCHANDIZE, consisting of

Piano Fortes,

of his own manufacture, with PATENT DOUBLE SOUNDING BOARD, AND IRON FRAME, which for beauty of finish and volume of sound, is not surpassed by any instrument of the kind now in use.

Also, an assortment of

M E L O D E O N S ,

from the manufactory of GEO. A. PRINCE & CO., of various sizes, patterns, and prices, suitable for Churches and the parlor. Also, a full stock of

VIOLINS, FLUTES, GUITARS, BANJOS, TAMBORINES, CLARIONETS,

VIOLINCELLOS, FIFES, FLAGEOLETS, DRUMS, REEDS, TUNING FORKS,

TUNING HAMMERS. PITCH PIPES.

and every other article pertaining to a Music Store. Also on hand, the largest and best selection of

Secular and Sacred Music

ever brought to this market, which will be mailed to persons in the country free of postage.

We also inform the public that any description of goods not to be had in Columbia will be ordered for those in want. Ladies can procure from us any article needed for fancy or ornamental work, by sending their orders.

N. B.—Persons sending for goods to be ordered, will please be particular in expressing the quality, the proper name, the number, or weight. The patronage of the public is respectfully solicited.

P. M. JOHNSON, Salesman.

August, 1860.

8—6t

JOSEPH NEWMAN.

W. WHITELOCK & CO'S. SUPER-PHOSPHATE OF LIME!

CAN ALWAYS BE HAD OF

MULLER & SENN, Columbia, S. C.,

REESE & LINTON, Augusta, Ga.,

DEROSSET, BROWN & Co., Wilmington, N. C.,

C. A. GRAESER, Charleston, S. C.,

N. A. HARDEF & Co., Savannah, Ga.

THIS is the only article of the kind in market prepared South of Mason & Dixon's line, and we claim it to be superior to any other made in the United States. We are able to accomplish this because the raw material is in larger supply, and cheaper in our market than in any other, and we manufacture our own Oil of Vitriol; and for its value as a manure we appeal to planters who have tried it alongside of the various other preparations.

In the application of manure the planter has to rely entirely on the moral character and standing of the dealer, and we invite him to satisfy himself thoroughly on these points, or if he cannot conveniently do so, to purchase sparingly and test its value himself by the side of other manures.

W. WHITELOCK, & CO.,
44 Fourth Street, Baltimore.

August, 1850.

8—6m

G. M. THOMPSON & CO.,

HAVE NOW ON HAND A COMPLETE ASSORTMENT OF
BOOTS, SHOES AND BROGANS,
HATS, CAPS AND TRUNKS,

WHICH THEY WILL SELL AT WHOLESALE AND RETAIL ON THE MOST FAVORABLE TERMS.
 PLANTERS AND OTHERS WISHING TO PURCHASE

NEGRO SHOES AND BROGANS

WILL FIND OUR STOCK

THE MOST EXTENSIVE AND COMPLETE WE HAVE EVER HAD.

October, 1860

10—1t

SOUTHERN GROWN FRUIT TREES,

FOR SALE AT THE

"GEORGIA NURSERY," near Augusta, Ga.

By FLEMING & NELSON.

THE subscribers offer for sale a fine lot of GRAFTED YOUNG FRUIT TREES, consisting, in part, of 20,000 APPLE TREES, one and two years old, and from five to eight feet high, among which are Sixty of the best Southern varieties. 15,000 PEACH TREES, one year old, of very thrifty growth, Forty varieties of which ripen in succession from early June to November. 5,000 PEAR TREES, Thirty varieties of which are on Quince roots. Fifteen varieties of PLUMS, ripening in succession through the summer. Also, Apricots, Nectarines, Almonds, Figs, &c., Grape Cuttings, Strawberry Plants, Asparagus Roots, &c., &c. Ever-Blooming Roses and Ornamental Shrubbery.

Our Trees will compare favorable with those of any Southern Nursery, and we will sell as cheap as any of them. We take great care in packing them in Moss and Straw, so that they may be shipped safely to any part of the Southern States.

Descriptive and Priced Catalogues sent gratis to all applicants. Address

FLEMING & NELSON,
Augusta, Ga.

N. B.—November and December is the best time for Planting Trees. Early Orders respectfully solicited.

Oct. 1860 5m

FOR SALE--TEN YEAR'S TIME.

I WILL sell my PLANTATION, on Turkey Creek, 7 miles North-East of Edgefield C. H., of

1668 Acres,

to an approved purchaser upon ten year's time, interest from date. Upon the place will be found a good frame Dwelling House, Gin House, Serew, and all other out-buildings used upon a plantation.

Land buyers will do well to look at this place.

ELBERT BLAND.

Oct.—1860

10—1t

FOR SALE.

A THOROUGH-BRED DEVON BULL, between 4 and 5 years old, from the best herds in Maryland and Virginia. Pedigree furnished to such as desire it.—PRICE \$60—delivered on the ears of the C. & S. C. R. R., at Charlotte, N. C.

Address, at that place,

J. M. HUTCHISON.

Oct.—1860

10—1t

TREES, PLANTS, SEEDS, &c.

W M. R. PRINCE & Co. Flushing, N. Y., offer more extensive and perfect collections in each department of their business than ever before.

The following Priced Catalogues will be sent to applicants who enclose stamps, while we shall exercise all possible care to guard against supplying them to Traveling Tree Venders, who make use of them in obtaining orders for other trees. *We have no Traveling Agents.*

No. 1.—Descriptive Catalogue of Fruit and Ornamental Trees, Shrubs, and all Small Fruits.

No. 2.—Roses, and all kinds of Flowering Plants.

No. 4.—General Wholesale Price-list for Nurseries.

No. 5.—Wholesale Catalogue of Vegetable and Tree Seeds.

No. 6.—Descriptive Catalogue of 160 varieties of Strawberries, far surpassing any other collection in this country or Europe.

No. 8.—Wholesale Price-list of Native and Foreign Grapes.

No. 9.—Bulbous Flowers, Paeonies, Dahlias, Iris, Primroses, Poleanthus, Auriculas, Cowslips, &c.

No. 10.—Wholesale Catalogue of the same.

No. 13.—Green-House Plants.

No. 14.—Descriptive Catalogue of 320 Native Varieties, and 120 Foreign Varieties of Grapes. We have a great stock of the leading Varieties of Grapes, of which 80,000 are strong layers, and 25,000 in large pots.

Orders are packed in a superior manner, forwarded as desired, and a transportation Receipt mailed to the purchaser.

Oct. 1860. 1t

DAHLIAS AND CRYSTAL MUMS.

A SUPERB collection of the finest French Belgian and English Prize varieties can be furnished.—Packed so as to go with safety to any distance. These have been procured at great trouble and expense, and are offered at a reasonable rate. Price from \$8 to \$10 per dozen. See descriptive list in May number of *Farmer and Planter*.

Crysanthemums.

The finest Pompon varieties—beautiful ornaments in autumn. Price \$2.50 per dozen.

THE DAHLIAS

Can be sent out from this time until the 1st of July, and will bloom beautifully until frost.

WM. SUMMER,
Columbia, S. C.

May, 1860

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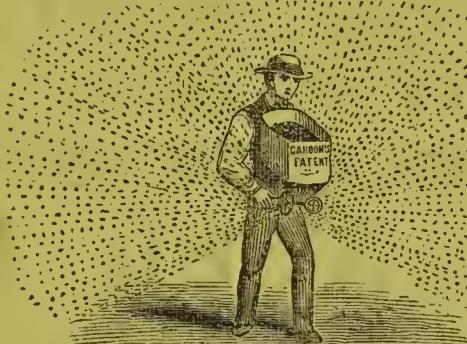
44 Fourth Street, Baltimore.

August, 1850.

8—6m

CAHOON'S PATENT BROAD-CAST SEED-SOWER, FOR SOWING

**WHEAT,
HEMP,
RYE,
GRASS SEEDS,**



**OATS,
BARLEY,
BUCKWHEAT,
FERTILIZERS, &c.,**

PATENTED SEPTEMBER 1st, 1857.

THIS MACHINE is made in a substantial and durable manner. It saves four-fifths of the labor and time—it enables any one, with a little experience, to sow with regularity; and, in consequence of the evenness with which it distributes the seed, causes a saving of from one quarter to one-third of the grain ordinarily required.—Farmers who have used this Machine for two seasons, say that they would not be without one for three times the cost.

THE HORSE-POWER MACHINE,

At the usual walking gait of a horse, sows from TEN to FIFTEEN ACRES PER HOUR, throwing Wheat about SIXTY FEET WIDE at each passage. Price \$50 00.

This Machine sows Guano, Plaster, Lime, Liquid Manure, &c.

THE HAND MACHINE,

At a common walking gait, sows from FOUR to EIGHT ACRES PER HOUR, throwing out wheat about FORTY FEET WIDE. Price \$12 00.

The HAND MACHINES are now manufactured in this city by E. E. SCOFIELD. Any one purchasing for a particular county, from one to three cases, (of eight Machines each) will have the *exclusive right* of using and selling, in that county, for the term of *five years*, dating from the 20th November, 1859.

A very liberal discount made to Agents. For County Rights, and Machines at wholesale, apply to

D. S. CHASE, Augusta, Ga.

July, 1860.

7—6m.

KING'S MOUNTAIN MILITARY SCHOOL, YORKVILLE, S. C.

THE Principals of this Institution take great pleasure in informing their patrons and the public, that their corps of experienced instructors has been re-inforced, by the arrival of Lieut. J. W. JAMISON, who has been for some time past in Paris, France, preparing specially as their teacher of French.

Terms.

\$200 per school year of ten months, payable \$100 at the beginning and middle of each year. This amount covers every expense except that of clothing. Pupils will be charged from the month of entrance. None will be received under 12 or over 18 years of age, or who cannot read and write with facility. Special attention paid to the preparation of boys for the College and the Military Academies of the State. Application for admittance will be made to the Principals.

Maj. M. JENKINS, } Principals.
Capt. A. COWARD, }

SUPER-PHOSPHATE OF LIME,

MANUFACTURED BY

W. WHITELOCK & Co.,
Baltimore, Md.

HAVING taken the agency of the above valuable FERTILIZER, we take pleasure in recommending it to our Planters, with the fullest confidence that it will give entire satisfaction. The universal success which has attended its use in the Southern States for several years, together with the analyses of Charles Bicknell, P. H. D., and of Prof. Shepard, of Charleston, S. C., entitles it to the highest consideration. A supply constantly on hand. Pamphlets, with full directions for its use, &c., will be forwarded, on application.

MULLER & SENN, Sole Agents,
Columbia, S. C.

Feb.—1860

2—tf.

PERUVIAN GUANO,

DELIVERED FROM THE PERUVIAN AGENT'S WAREHOUSES, AND WARRANTED OF THE BEST QUALITY SOLD IN THIS CITY,

With Baltimore Inspector's Brand.

SANDS'

MANIPULATED GUANO,

CONTAINING Nine to Ten per cent. AMMONIA, and Fifty to Fifty-five per cent. PHOSPHATE OF LIME, and believed to be better for the Wheat crop than Peruvian Guano. Price \$47 per ton of 2000 lbs—put up in bags of 150 to 160 lbs. Also,

PHOSPHATIC GUANOS,

of every description, brought to this port, at usual market prices.

PLASTER,

In barrels, with five to ten per cent. of POTASH. Also, PURE PLASTER

BONES,

dissolved in Sulphuric acid, with five or ten per cent. POTASH.

As Orders received for any of the above articles, will be executed with my usual promptness and fidelity, at

S. SANDS' FARMERS & PLANTERS' AGENCY,

At the office of the "RURAL REGISTER," 128 Baltimore street, Baltimore, Md.

Agricultural Implements AND Machinery,

Of every description. All kinds of the Improved breeds of LIVE STOCK, viz:—HORSES, CATTLE, SHEEP, SWINE, FOWLS, &c., and SEEDS, and TREES, and PLANTS, of all kinds.

As To the many thousands with whom he has been transacting business for so many years, he can confidently appeal for his prompt and judicious discharge of all the duties committed to him, and asks for a continuance of their support and influence to his present Agency. Address

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128 Baltimore Street, Baltimore, Md.

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REFERENCES.—Hon. James H. Hammond, Beech Island, S. C.; David Dickson, Sparta, Ga.; J. Thos. H. White, Charleston, S. C.; Wm. P. Andrews, Phoenix, S. C.; Benj. Rhett, Bonny Land; Chas. Baring, Adam's Run; John Wetherspoon, Society Hill; J. H. Trapier, Georgetown; Robt. Chisolm, Society Hill; and many others in South Carolina and Georgia, who obtained their supplies from this Agency.

"THE RURAL REGISTER"

Is alike adapted to the FARM and FIRESIDE, and will contain from time to time elegant ENGRAVINGS, illustrative of Agriculture, Horticulture, Floriculture, Rural Architecture, &c.

NEW VOLUME COMMENCED JULY 1ST, 1860.

TERMS: \$1 per annum—Six Copies for \$5—Twelve Copies for \$10.

September, 1860. 3t

S. SANDS & MILLS, Editors and Proprietors,
128 Baltimore Street, Baltimore, Md.

PLANTERS OF SOUTH CAROLINA!

WE CALL YOUR ATTENTION TO

RHODES' STANDARD MANURE

FOR

SOLUBLE PHOSPHORIC ACID.

ALSO,

Cotton, Wheat, Corn, Rye, and Oats Culture,
Besides the various Root Crops, Gardens, &c.

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Office 82 Bowly's Wharf, Baltimore.

FIFTH
ANNUAL FAIR
OF THE
STATE AGRICULTURAL SOC'Y.
OF SOUTH CAROLINA,
To be held at COLUMBIA,
On the 13th, 14th, 15th, and 16 NOVEMB'R, 1860.

THE EXECUTIVE COMMITTEE of the State Agricultural Society of South Carolina, respectfully call the attention of the citizens of South Carolina, and the Southern States, to their approaching Exhibition.

Premiums will be awarded for all articles of

AGRICULTURAL, HORTICULTURAL, POMOLOGICAL AND MECHANICAL INTEREST,

As well as for all articles of **LADIES' FANCY WORK** and **DOMESTIC ECONOMY**, embraced in a very comprehensive Premium List, which can be obtained by application to R. J. GAGE, Secretary of the Society, at Fair Forest, S. C., or to R. M. STOKES, Columbia, S. C.

The benefits to the State, arising from these Annual Exhibitions, are beginning to be recognized now by almost everybody, and the Committee feels confident in assuring Visitors that they will be fully repaid for their investment.

All articles intended exclusively for Exhibition, will be passed over the Rail-Roads in South Carolina upon the same terms as at former Exhibitions.

Exhibitors will please give notice in due season to the Rail-Road officers, of the number, the kind of animals at the point of shipment, &c.

 VISITORS WILL GO AND RETURN FOR ONE FARE. 

:0:

EXECUTIVE COMMITTEE:

A. P. CALHOUN,
ROBERT HARLEE,
J. FOSTER MARSHALL,
W. R. ROBERTSON,

October, 1860.

2t

D. W. RAY,
J. P. KINARD,
R. J. GAGE.

To all who attend the State Fair.

THE Annual Meeting of our State Agricultural Society will be the very time for renewing subscriptions, and for new names to be added to our list. If you cannot attend yourself, send your DOLLAR by some friend.

MAKE UP YOUR CLUBS BY THAT TIME, and take back the Premiums with you.

R. M. STOKES, Columbia.

EVERY PLANTER HIS OWN MILL!

IT WILL GRIND

10,000 BUSHELS

OF CORN

WITHOUT REPAIRING.

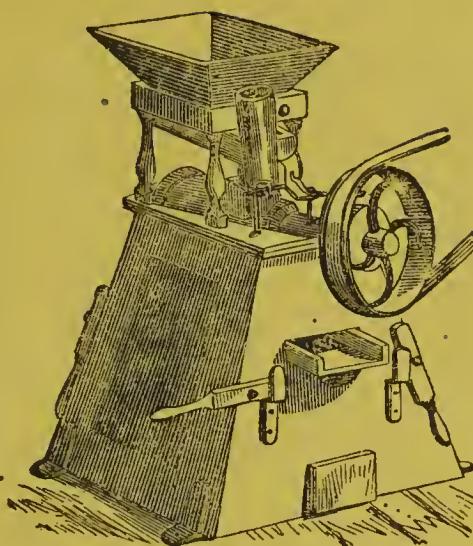
THE VERY MIL

THE PLANTERS

WANTED.

CORN IS SCARCE.

SAVE THE MILL TOL



IT WILL SAVE ITS COST IN LESS THAN ONE YEAR.

Having been appointed Sole Agent for the sale of BOYER & BRO'S.

PORTABLE PLANTATION FLOUR AND GRIST MIL

for the States of SOUTH CAROLINA and GEORGIA, I would inform the Planters and Farmers of the States, that I have one of the MILLS in operation in the Office of the FARMER AND PLANTER, at Columbia, S. C., and am ready to supply any number of said Mills.

THERE IS NO HUMBUG IN IT.

It will grind Family Flour equal to any Burr-Stone Mill, and make as good a "turn-out," while it has equal for

GRINDING CORN MEAL AND GRITS.

The Proprietors of this Mill, having discovered a new process, by which they have made the grinding parts of their Mill *one hundred per cent. harder than those of any other*, and the Mill being constructed on entirely new principles, now offer it to the farming and planting community, as a far superior Mill to any heretofore introduced, and entirely removes the objection to Iron Mills—that they will soon wear out. It is arranged with self-sharpening qualities, that it can be run for years without any repairs, and is always ready for work.

It occupies a space of about three feet square, and weighs about 275 lbs. It can be worked by gin power, or one or two-horse railway, or two or four-horse lever, or steam or water power, and will grind Corn, Wheat, Rye or Oats, from six to twelve bushels per hour, according to fineness required; it is also arranged with Steel Cutters, to grind corn in the ear. The grinding parts of the Mill can be placed at a small expense. The following are the prices of Mills, delivered at any Depot at Columbia.

With Sieve arranged for Sifting Corn Meal, for Family use, while Grinding	\$55
With Bolting Machine attached, for making Family Flour	80
Hand Mill	12

Acting as Agent for other parties, I cannot, in any case, give credit on these Mills. *Cash, or City acceptance, must accompany each order.*

CALL AND SEE IT FOR YOURSELF.

I most honestly commend these Mills to the Planters of the South, as being, in my opinion, the Mill suited, in every respect, to their wants.

R. M. STOKES, Columbia, S. C.,

Sole Agent for South Carolina and Georgia.

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REFERENCES.—Hon. James H. Hammond, Beech Island, S. C.; David Dickson, Sparta, Ga.; J. Thos. H. White, Charleston, S. C.; Wm. P. Andrews, Phoenix, S. C.; Benj. Rhett, Bounty Land; Chas. Baring, Adam's Run; John Wetherspoon, Society Hill; J. H. Trapier, Georgetown; Robt. Chisolm, Society Hill; and many others in South Carolina and Georgia, who obtained their supplies from this Agency.

"THE RURAL REGISTER"

Is alike adapted to the FARM and FIRESIDE, and will contain from time to time elegant ENGRAVINGS, Illustrative of Agriculture, Horticulture, Floriculture, Rural Architecture, &c.

NEW VOLUME COMMENCED JULY 1ST, 1860.

TERMS: \$1 per annum--Six Copies for \$5--Twelve Copies for \$10.

S. SANDS & MILLS, Editors and Proprietors,
128 Baltimore Street, Baltimore, Md.

NEW MUSIC STORE, COLUMBIA, S. C.

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Piano Fortes,

of his own manufacture, with PATENT DOUBLE SOUNDING BOARD, AND IRON FRAME, which for beauty of finish and volume of sound, is not surpassed by any instrument of the kind now in use.

Also, an assortment of

M E L O D E O N S ,

from the manufactory of GEO. A. PRINCE & CO., of various sizes, patterns, and prices, suitable for Churches and the parlor. Also, a full stock of

**VIOLINS, FLUTES, GUITARS, BANJOS, TAMBORINES, CLARIONETS,
VIOLINCELLOS, FIFES, FLAGEOLETS, DRUMS, REEDS, TUNING FORKS,
TUNING HAMMERS. PITCH PIPES.**

and every other article pertaining to a Music Store. Also on hand, the largest and best selection of

S e c u l a r a n d S a c r e d M u s i c

ever brought to this market, which will be mailed to persons in the country free of postage.

We also inform the public that any description of goods not to be had in Columbia will be ordered for those in want. Ladies can procure from us any article needed for fancy or ornamental work, by sending their orders.

N. B.—Persons sending for goods to be ordered, will please be particular in expressing the quality, the proper name, the number, or weight. The patronage of the public is respectfully solicited.

P. M. JOHNSON, Salesman.

August, 1860.

8—6t

JOSEPH NEWMAN.

W. WHITELOCK & CO'S. SUPER-PHOSPHATE OF LIME!

CAN ALWAYS BE HAD OF

MULLER & SENN, Columbia, S. C.,

REESE & LINTON, Augusta, Ga.,

DEROSSET, BROWN & Co., Wilmington, N. C.,

C. A. GRAESER, Charleston, S. C.,

N. A. HARDEE & Co., Savannah, Ga.

THIS is the only article of the kind in market prepared South of Mason & Dixon's line, and we claim it to be superior to any other made in the United States. We are able to accomplish this because the raw material is in larger supply, and cheaper in our market than in any other, and we manufacture our own Oil of Vitriol; and for its value as a manure we appeal to planters who have tried it alongside of the various other preparations.

In the application of manure the planter has to rely entirely on the moral character and standing of the dealer, and we invite him to satisfy himself thoroughly on these points, or if he cannot conveniently do so, to purchase sparingly and test its value himself by the side of other manures.

**W. WHITELOCK, & CO.,
44 Fourth Street, Baltimore.**

August, 1850.

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CAHOON'S PATENT BROAD-CAST SEED-SOWER, FOR SOWING

WHEAT,
HEMP,
RYE,
GRASS SEEDS,



OATS,
BARLEY,
BUCKWHEAT,
FERTILIZERS, &c.,

PATENTED SEPTEMBER 1st, 1857.

THIS MACHINE is made in a substantial and durable manner. It saves four-fifths of the labor and time—enables any one, with a little experience, to sow with regularity; and, in consequence of the evenness with which it distributes the seed, causes a saving of from one quarter to one-third of the grain ordinarily required.—Farmers who have used this Machine for two seasons, say that they would not be without one for three times the cost.

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A very liberal discount made to Agents, For County Rights, and Machines at wholesale, apply to

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July, 1860.

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\$200 per school year of ten months, payable \$100 at the beginning and middle of each year. This amount covers every expense except that of clothing. Pupils will be charged from the month of entrance. None will be received under 12 or over 18 years of age, or who cannot read and write with facility. Special attention paid to the preparation of boys for the College and the Military Academies of the State. Application for admittance will be made to the Principals.

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Columbia, S. C.**

Feb.—1860

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CHOICE SPANISH SEGARS, SNUFF AND SNUFF-BOXES FINE GERMAN SEGARS,
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BEST SMOKING TOBACCO, SEGAR-STEMS, &c.

BRANDIES, WINES, &c.

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HOLLAND GIN,

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Persons wishing to purchase any of the articles above enumerated, will please call and examine the Stock, They will be sold, at the *smallest profits*, FOR CASH.

DAHLIAS AND CRYSANTEMUMS.

A SUPERB collection of the finest French Belgian and English Prize varieties can be furnished.—Packed so as to go with safety to any distance. These have been procured at great trouble and expense, and are offered at a reasonable rate. Price from \$8 to \$10 per dozen. See descriptive list in May number of *Farmer and Planter*.

Crysanthemums.

The finest Pompone varieties—beautiful ornaments in autumn. Price \$2.50 per dozen.

THE DAHLIAS

Can be sent out from this time until the 1st of July, and will bloom beautifully until frost.

May, 1860

5—tf

WM. SUMMER,
Columbia, S. C.

YORKVILLE FEMALE COLLEGE.

THE 13th term of this Institution will begin on the 18th inst.

EXPERIENCED AND EFFICIENT TEACHERS

Will be employed in all the departments—Primary, Collegiate and Ornamental. The rates of Tuition are lower than in most of our first class schools.

GOOD BOARD can be obtained at \$10 per month, exclusive of Lights. The UNDERSIGNED will receive FORTY young ladies into his house, which is adjoining the College lot.

CIRCULARS, giving full particulars, will be sent to those addressing

J. MONROE ANDERSON,
President.

Feb.—1860

2—tf

Professor Mapes' Nitrogenized

SUPER-PHOSPHATE OF LIME.

FOR sale in bags of 160 pounds each, at the manufacturer's price, with the actual expense of freight, &c., only added.

The subscribers having been appointed Sole Agents, in this city, for the sale of the above celebrated fertilizer, will furnish it at manufacturer's prices.

Per ton of 2,000 pounds, \$50 net cash.

Expenses of freight, &c., \$3.

Delivered in Charleston at \$53 per ton, net cash.

Per bag of 160 pounds, \$4.25 net cash.

Pamphlets, giving full particulars for its use, will be sent on application.

GRAVELEY & PRINGLE,
No. 44 East Bay, South of the Post Office,
Charleston, S. C.

Plows, Corn-shellers, Hay-cutters, Grant's Patent Fan Mills, Little Giant Corn and Cob Mills, Excelsior Burr Stone Mills, and all kinds of Agricultural Implements, for sale low.

—ALSO—

A large assortment of fine ENGLISH GUNS, made expressly to order, with Powder Flasks, Shot Bags, &c., in great variety, and a general stock of English and American HARDWARE, including best Cut Nails.

Feb.—1860 2—tf

BRAHMIN CATTLE FOR SALE.

FULL-BLOOD and Grade Calves, Bulls and Heifers, of the celebrated

Brahmin Cattle,

for sale. Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON.
4—tf

April, 1860

PLANTERS OF SOUTH CAROLINA !

WE CALL YOUR ATTENTION TO

RHODES' STANDARD MANURE

FOR

SOLUBLE PHOSPHORIC ACID.

ALSO,

Cotton, Wheat, Corn, Rye, and Oats Culture,
Besides the various Root Crops, Gardens, &c.

IN the autumn of 1857, we shipped Fifty Barrels RHODES' SUPER-PHOSPHATE to Rhett & Robson, of Charleston, with the view of introducing this manure for Cotton culture, we having previously ascertained this staple required largely of Phosphoric Acid, and the sections for this culture a *soluble manure*.

We subsequently induced Col. A. G. Sumner, of Pomaria, to experiment with *Ten Tons*, at our risk, a detailed report of which result was published in the *South Carolinian*, and afterwards in the *Farmer and Planter*.—The demand speedily increased, and the following year the sales were comparatively large. September, 1859, we addressed letters of enquiry to some eighty Planters, whose address was furnished us by Rhett & Robson; quite a number responded, and the most of them were met by Mr. Rhodes during the exhibition of your State Agricultural Society, at Columbia.

While a very large proportion felt warranted in speaking in terms of high commendation, there were some who referred to their experiments with disappointment—attributing to various causes, drought, plowing too deep, &c. The result has been, that during the autumn and winter of 1859, we supplied our different agencies, near

20,000 Barrels

for Cotton culture, creating a demand which has compelled us to greatly enlarge our manufacturing facilities.

The object we aim to accomplish is, to ESTABLISH a STANDARD for SOLUBLE Phosphoric Acid—the nourishing property of plants; there being, as all know, a standard for Ammonia—the stimulating property—in dry Peruvian Guano; (Cotton seed yielding Potash.)

We also urge upon Planters to make their own combinations from these Standard Ingredients, and not to resort to them until they have exhausted their stock of compost manures, but use them as adjuncts.

It may not be inappropriate for us to add, that "Rhodes' Manure" is manufactured under the immediate supervision of the eminent manufacturing Chemists, POTTS & KLETT, who, with ourselves, feel full responsibility to the Planters of the United States. These gentlemen have placed in the hands of Rhett & Robson a binding legal GUARANTEE of "purity and freedom from all adulteration in the Rhodes' Manure."

We also authorize the obtaining of samples of

Rhodes' Super-Phosphate;

same known to have come from ourselves or through our accredited Agents, which can be placed in the hands of competent Chemists for complete analysis; and should the result of their determinations disclose anything but STANDARD of best SUPER-PHOSPHATE, we will pay the fee of examination, and authorize such public use as the party may elect.

Prof. Joseph Jones, of Augusta, Georgia, Chemist to the "Cotton Planters Convention," who made critical examination from a very large stock in hands of J. A. Ansley & Co., Augusta, and Patten & Miller, Savannah, in an elaborate Report to Hon. Howell Cobb, President of the Convention, pronounced "Rhodes' Manure of uniform commercial value." Prof. Jones has also accepted an invitation to visit the WORKS for inspection, the result of which he will include in his report to the Convention which will assemble at Macon, Ga., December next, and which, we hope, may prove satisfactory to Planters.

We respectfully refer to our sole Agents for South Carolina,

RHETT & ROBSON,
Charleston,

who will have ample stock of Rhodes' Manure on hand at all times, which they will furnish in desired quantities.

B. M. RHODES & Co.,

Office 82 Bowly's Wharf, Baltimore.

BOOK AND JOB PRINTING,
AT THE
“FARMER AND PLANTER” OFFICE,

Columbia, S. C.

THE subscriber having supplied the office of *The Farmer and Planter* with a complete assortment of the latest styles of Type, Borders, Rules, &c., together with one of

ADAMS' JUSTLY CELEBRATED BOOK-PRESSES,

is now prepared to execute all kinds of Printing, from the smallest Visiting Card to the largest Book, in style equal to any Printing Office in the country, on reasonable terms, and in the shortest time.

Having no other occupation, my entire personal attention is given to all work executed in my office. An experience of

Thirty years in the Printing Business,

In some of the best Printing Offices in the United States, will be sufficient guarantee that all work entrusted to me will be executed well. Persons desiring

BOOKS, PAMPHLETS, CIRCULARS,	LAWYERS' BRIEFS, LAWYERS' BLANKS, BALL TICKETS,	CARDS, BLANK NOTES, BLANK CHECKS,	BILL HEADS, LABELS, SMALL SHOW-BILLS,
------------------------------------	---	---	---

Printed, will please give me a trial. Nothing shall be neglected, on my part, to give satisfaction.

A SHARE OF PATRONAGE IS SOLICITED.

ROB'T. M. STOKES,

Office in the Alley below Commercial Bank.

Don't Forget the Name.

N. B.—Finding that many mistakes have occurred in supposing that E. R. STOKES, *Book-Binder*, and ROB'T. M. STOKES, Publisher of *The Farmer and Planter*, to be one and the same person, I would request my friends to remember that my office is a few doors below the Commercial Bank, and all letters connected with *The Farmer and Planter* office should be addressed to

June, 1860.

6—tf

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GRASS SEEDS,**



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NICHOLS' CHINA DEPOT.

SUPERIOR FRENCH PORCELAIN,

AND

CHINA-FINISHED WHITE GRANITE WARE,

OF OUR OWN IMPORTATION.

H. C. NICHOLS,

NEXT TO THE COMMERCIAL BANK.

COLUMBIA, S. C.,

Has just received, direct from *England* and *France*, a splendid Stock of the above goods, also—

HOUSE-KEEPING ARTICLES, USEFUL AND ORNAMENTAL.

H. C. NICHOLS, China Depot.

November, '59

11—tf.

CLOTHING! CLOTHING!

E. FULLINGS & CO.

ARE NOW OFFERING, AT THE LOWEST CASH RATES, ONE OF THE BEST ASSORTED STOCKS
OF SUMMER

READY-MADE CLOTHING

They have ever manufactured for the Southern Market. They have, in connection with Clothing, a very large Stock of MEN'S FURNISHING GOODS: also, Men's and Boys'

STRAW AND FELT HATS.

Planters, give them a call. Their Store is three doors South of the Commercial Bank, Main-st., Columbia, S. C
July, 1859 7—tf

THOMAS LEARMONT,

FLORIST,

Columbia, S. C.,

Cultivates, for Sale,

EVERGREEN TREES, SHRUBS AND ROSES,

GERANIUMS, GREEN-HOUSE PLANTS,

CAMILLIAS, VERBENAS,

PETUNIAS, DAHLIAS, CRYSANthemums.

Nov.—59

11—tf.

1859--60.

POMARIA, S. C., STOCK FARM.

I HAVE established a STOCK FARM in conjunction with other pursuits, at POMARIA, S. C., and will be prepared to fill engagements during the year, for the following varieties:

IMPROVED NORTH-DEVON CATTLE.

All my Breeding Stock were purchased from Col. A. G. SUMMER, who bred the first Premium Bull and Cow exhibited at the South Carolina State Fair, 1858, and are

THOROUGH-BRED HERD-BOOK DEVONS,

of the BEST MILKING FAMILIES, carefully selected by him from the Herds of GEO. PATTERSON, Md., L. G. MORRIS, N. Y., and RICHARD PETERS, Ga., as well as strains from recent importations. In addition to these, I have, at a heavy cost, incorporated into my herd, Mr. JAS. T. LATTA'S imported Devons, bred by Mr. GEO. TURNER, of "Barton," near Exeter, England, consisting of Imported "CHASSEUR," a first-class 2 year old Bull; " CURLY," an equally superior Heifer. These cattle will enable me to furnish new strains, and the best crosses, to all the Devon Herds in the South.

I have now for sale the following BULL CALVES, at prices named:

No. 1.—Bull Calf, "YULEE," out of "Charity," by W. Williams Sykes, out of an old English-bred Devon Cow, (a great milker); Sire Atlas, &c.; calved December 1st, 1858: Price \$150 00.

No. 2.—Bull Calf "LOD," out of "Rachel," by Col. Williams' "Red Comet," dam Impt. Red Lady, bred by the Earl of Leicester; Sire Atlas; calved June 10th, 1859: Price \$250 00.

N. B.—Red Lady, at 18 years of age, was a great milker. Rachel took the 1st prize, as a 2 year old heifer, at the South Carolina State Fair, 1858, and is a superb milker. I regard this heifer and her calf, the best Devon stock in America, for the Dairy.

No. 3.—Bull Calf "FORDHAM," out of Princess V., by Impt. Frank Quartly, out of Impt. Princess; Sire Atlas; calved July 30, 1859: Price \$200 00.

N. B.—Princess V., was the 2d prize 2 year old heifer at the South Carolina State Fair, 1858.

ENGAGEMENTS for Bull Calves, to be dropped in 1860, will be registered, and applicants furnished in the order of reception.

The beautiful 1st premium Bull of the State Fair Exhibition, 1858, was bred from this herd of cattle, and has since been sold by Col. Lod Hill for \$300 00

After an *expensive* experience of 20 years with all other improved breeds of cattle, I rely upon the Improved North-Devons for all plantation purposes, being, in the main, good milkers, thrifty, hardy, and subsisting on scanty pasturage, better than natives. The same is claimed for the Brahmin grades, but with this breed I have no experience.

SOUTH-DOWN SHEEP.

I have heretofore imported fine specimens from the celebrated stock of JONAS WEBB; and this season I have again imported Five magnificent EWES, which will bear comparison with the best. I will dispose of the Buck Lambs of these and the 1st Premium Ewes: Price \$50 00 each.

COTSWOLD SHEEP.

I have imported a select Flock of these—the best of the long-wooled Sheep. They are large, fine feeders, fatten well, and furnish immense fleeces of long wool, well suited to the manufacture of strong, coarse, woolen goods. The buck lambs of 8 Ewes will be furnished the Summer of 1860: Price \$50 00 each. Half-bred Buck lambs out of fine Bakewell Ewes: Price \$25 00 each.

ESSEX SWINE.

A fine breed of medium-sized black Hogs, and being very free from mange, are admirably adapted to lot breeding. They make a good cross for all other breeds, and, arriving at early maturity, fatten readily.

I have purchased from JAS. T. LATTA, Esq., his imported Essex Stock—these being the finest and largest of the breed in this country. Price of choice pigs, carefully selected, from my Imported Boar and Sows, at 8 weeks old, \$40 00 per pair. From other fine Sows, by Imported Boar "Pendleton," \$25 00 per pair.

Now ON HAND, 2 Litters of the latter stock; also, 1 Litter of a fine Sow, bred by myself.

CHESTER COUNTY SWINE.

A large White breed, thrifty and prolific, very popular in Pennsylvania and Maryland, and fine plantation stock-hogs. They grow to large size, and fatten readily from fifteen to eighteen months old: Price \$25 00 per pair. From the great demand for this breed, and the misfortune of losing two of my sows, I have been unable to supply all applicants, but will do so this Winter.

October, 1859

10--tf

WM. SUMMER, Pomaria, S. C.

I. D. MORDECAI, Agent,

NO. 134 MAIN STREET,

NEXT DOOR TO JOHN MCKENZIE'S CONFECTIONARY STORE,
COLUMBIA, S. C.,

IS CONSTANTLY RECEIVING AND HAS CONSTANTLY ON HAND,

SEGARS, TOBACCO, &c.

CHOICE SPANISH SEGARS, SNUFF AND SNUFF-BOXES FINE GERMAN SEGARS,
SEGAR CASES, BEST CHEWING TOBACCO, GENUINE MEERSHAUM PIPES,
BEST SMOKING TOBACCO, SEGAR-STEMS, &c.

BRANDIES, WINES, &c.

COGNAC BRANDY,
SUPERIOR BLACKBERRY AND CHERRY BRANDY,
HOLLAND GIN,

JAMAICA RUM,

BEST BRANDS CHAMPAGNE WINE,

GERMAN, SCOTCH AND IRISH WHISKEY,

OLD MADEIRA, SHERRY AND PORT WINE,

CHOICE RYE WHISKEY,

SUPERIOR CLARET AND HOCK WINE,

ASSORTED GENUINE CORDIALS,

PORTER, ALE AND LAGER BEER IN JUGS.

He is, also, Agent of the BALTIMORE INK COMPANY, and the PHILADELPHIA STEAM PAPER-BAG MANUFACTORY.

Persons wishing to purchase any of the articles above enumerated, will please call and examine the Stock, They will be sold, at the *smallest profits*, FOR CASH.

ALLEN & DIAL,

COLUMBIA, S. C.,

Direct Importers and Wholesale and Retail Dealers in

ENGLISH AND AMERICAN HARDWARE & CUTLERY,
IRON, STEEL, NAILS,

MILL STONES, MILL IRONS,

BOLTING CLOTHS, STOCK KETTLES,

INDIA RUBBER AND LEATHER BELTING,
CARPENTERS', BLACKSMITHS' AND TANNERS' TOOLS.

AGRICULTURAL AND GARDEN IMPLEMENTS, in great variety.

FENDERS, ANDIRONS. SHOVELS AND TONGS,
And many other articles in the Housekeeping line.

Lime, Cement, Plaster, Paints, Oils,

FRENCH & AMERICAN WINDOW GLASS,

DOUBLE AND SINGLE BARREL GUNS, PISTOLS,

SHOT BELTS, POWDER FLASKS, POWDER, SHOT, &c.

All of which are offered for sale at prices that cannot fail to give satisfaction.

JOHN M. ALLEN.

JOHN C. DIAL.

February, 1860

IMPROVED ENGLISH GRASS-HOG.

This is a hardy, prolific breed, small-boned, short-legged, long, and broad bodied, lop-eared hogs; color sandy, spotted with black and white: said to subsist well on grass and clover, without grain, during the Summer, and to fatten kindly; attaining, with good feed, from 200 to 250 lb. net, at 9 months old, and from 350 to 400 lb., nett, at 21 months; whilst older hogs have reached 550 to 600 lbs. I have now on the way, 1 Boar and 4 Sows, of this breed; and, when tested, if found suited to the South, their produce will be offered for sale at reasonable prices.

In answer to frequent enquiries as to my prices for Grade Calves, I reiterate that I never sell Grades of any of my stock; nor have I offered any, except crosses of the Cotswold and Leicester Sheep, which, being a union of two long-wool breeds I deem valuable to the South. All animals, before they leave my farm, shall be in good condition, and honestly selected; and, if properly cared for and fed, will give satisfaction to the purchasers.

Pigs eaged, and other stock haltered, and delivered at Pomaria Depot, Greenville and Columbia Railroad, with proper food for the journey; after which they will be at the risk of the purchaser.

TERMS:—Cash for all sums under \$100; over that sum, a credit of four months, for acceptable Note or Factors acceptances.

October, 1859

10—tf

WM. SUMMER, Pomaria, S. C.

DAHLIAS AND CRYSANthemums.

A SUPERB collection of the finest French, Belgian and English Prize varieties can be furnished.—Packed so as to go with safety to any distance. These have been procured at great trouble and expense, and are offered at a reasonable rate. Price from \$8 to \$10 per dozen. See descriptive list in May number of *Farmer and Planter*.

Crysanthemums.

The finest Pompon varieties—beautiful ornaments in autumn. Price \$2.50 per dozen.

THE DAHLIAS

Can be sent out from this time until the 1st of July, and will bloom beautifully until frost.

WM. SUMMER,
May, 1860 5—tf Columbia, S. C.

Professor Mapes' Nitrogenized

SUPER-PHOSPHATE OF LIME.

FOR sale in bags of 160 pounds each, at the manufacturer's price, with the actual expense of freight, &c., only added.

The subscribers having been appointed Sole Agents, in this city, for the sale of the above celebrated fertilizer, will furnish it at manufacturer's prices.

Per ton of 2,000 pounds, \$50 net cash.

Expenses of freight, &c., \$3.

Delivered in Charleston at \$53 per ton, net cash.

Per bag of 160 pounds, \$4.25 net cash.

Pamphlets, giving full particulars for its use, will be sent on application.

GRAVELEY & PRINGLE,
No. 44 East Bay, South of the Post Office,
Charleston, S. C.

Plows, Corn-shellers, Hay-cutters, Grant's Patent Fan Mills, Little Giant Corn and Cob Mills, Excelsior Burr Stone Mills, and all kinds of Agricultural Implements, for sale low.

—ALSO—

A large assortment of fine ENGLISH GUNS, made expressly to order, with Powder Flasks, Shot Bags, &c., in great variety, and a general stock of English and American HARDWARE, including best Cut Nails.

Feb.—1860 2—tf

JOHN H. HUGHES,
No. 53 RICHARDSON STREET,
Columbia, S. C.,
DEALER IN

MARBLE AND GRANITE
OBELISKS, MONUMENTS,
HEAD-STONES, &c.

FOR SALE AT THE LOWEST PRICES.

W. W. PURSE, Agt.

SUPER-PHOSPHATE OF LIME,

MANUFACTURED BY

W. WHITELOCK & Co.,
Baltimore, Md.

HAVING taken the agency of the above valuable FERTILIZER, we take pleasure in recommending it to our Planters, with the fullest confidence that it will give entire satisfaction. The universal success which has attended its use in the Southern States for several years, together with the analyses of Charles Bicknell, P. H. D., and of Prof. Shepard, of Charleston, S. C., entitles it to the highest consideration. A supply constantly on hand. Pamphlets, with full directions for its use, &c., will be forwarded, on application.

MULLER & SENN, Sole Agents,
Columbia, S. C.

Feb.—1860 2—tf

YORKVILLE FEMALE COLLEGE.

THE 13th term of this Institution will begin on the 18th inst.

EXPERIENCED AND EFFICIENT TEACHERS

Will be employed in all the departments—Primary, Collegiate and Ornamental. The rates of Tuition are lower than in most of our first class schools.

GOOD BOARD can be obtained at \$10 per month, exclusive of Lights. The UNDERSIGNED will receive FORTY young ladies into his house, which is adjoining the College lot.

CIRCULARS, giving full particulars, will be sent to those addressing

J. MONROE ANDERSON,
President.

Feb.—1860 2—tf

W. H. YOUNG & CO.,
WHOLESALE AND RETAIL

BOOT, SHOE & LEATHER STORE,
COLUMBIA, S. C.,

ALWAYS on hand a large stock of Gent's Fine Boots, Shoes and Gaiters; also, a full assortment of Ladies' Gaiters, Slippers and Bootees, Misses', Children's and Boys' Shoes; Plantation Boots and Brogans.

With a large Manufactory, we are prepared to make to order any style of work in our line.

Also, a full stock of

LEATHER,

Consisting of Fine French Calf-Skins, American Calf-Skins, Baltimore Oak Sole, Hemlock Sole and Upper Leather, Fine and Common Lining Skins, Binding Skins, &c., with a full supply of Shoe Findings,

All orders from the country promptly attended to

April, 18 59. 4—tf

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WALDBERG NEAR HAVERSTRAW, N. Y.

FIRST PUBLIC SALE OF THOROUGH-BRED AYRSHIRES, DEVONS, SHORT HORNS, &c. &c.

H. H. LEEDS & Co. announce for sale, by AUCTION, WITHOUT RESERVE, on WEDNESDAY, 27TH JUNE inst., choice selections of the above varieties, from the herds of A. B. Conger.

Suffolk Hero (13,799), Messenger (3,155), and Jacentha's Romeo, and their get, &c., among the Short Horns; that of Exeter (198), Frank Quartly (205), &c. among the Devons; Prize Bull Marmion 2d, and the get of Imported Erie, &c., among the Ayrshires, will be offered, with a few Berkshire, Essex and Suffolk Swine; and also, a

TROTTING STALLION, HORSES, &c.

Catalogues with full pedigrees, showing the various strains of blood in the Devons and Short Horns, collected with care from the Herd Books, may be had, after the 1st of June, on application to the owner, or T. HOWARD PATTERSON, Herdsman, &c., Haverstraw, N. Y., or H. H. LEEDS & Co., 23 Nassau St., New York City.

KING'S MOUNTAIN MILITARY SCHOOL, YORKVILLE, S. C.

THE Principals of this Institution take great pleasure in informing their patrons and the public, that their corps of experienced instructors has been re-inforced, by the arrival of Lieut. J. W. JAMISON, who has been for some time past in Paris, France, preparing specially as their teacher of French.

Terms.

\$200 per school year of ten months, payable \$100 at the beginning and middle of each year. This amount covers every expense except that of clothing. Pupils will be charged from the month of entrance. None will be received under 12 or over 18 years of age, or who cannot read and write with facility. Special attention paid to the preparation of boys for the College and the Military Academies of the State. Application for admittance will be made to the Principals.

Maj. M. JENKINS, } Principals.
Capt. A. COWARD, }

CASHMERE GOATS.

FULL-BLOODED, fifteen-sixteenths, seven-eights, and three-quarter Grade

CASHMERE GOATS, for sale. Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON.

April, 1860

4—tf

BRAHMIN CATTLE FOR SALE.

FULL-BLOOD and Grade Calves, Bulls and Heifers, of the celebrated

Brahmin Cattle,

for sale. Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON.

April, 860

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BOOK AND JOB PRINTING,
AT THE
“FARMER AND PLANTER” OFFICE,

Columbia, S. C.

THE subscriber having supplied the office of *The Farmer and Planter* with a complete assortment of the latest styles of Type, Borders, Rules, &c., together with one of

ADAMS' JUSTLY CELEBRATED BOOK-PRESSES,

Is now prepared to execute all kinds of Printing, from the smallest Visiting Card to the largest Book, in style equal to any Printing Office in the country, on reasonable terms, and in the shortest time.

Having no other occupation, my entire personal attention is given to all work executed in my office. An experience of

Thirty years in the Printing Business,

In some of the best Printing Offices in the United States, will be sufficient guarantee that all work entrusted to me will be executed well. Persons desiring

BOOKS,	LAWYERS' BRIEFS,	CARDS,	BILL HEADS,
PAMPHLETS,	LAWYERS' BLANKS,	BLANK NOTES,	LABELS,
CIRCULARS,	BALL TICKETS,	BLANK CHECKS,	SMALL SHOW-BILLS,

Printed, will please give me a trial. Nothing shall be neglected, on my part, to give satisfaction.

A SHARE OF PATRONAGE IS SOLICITED.

ROB'T. M. STOKES,

Office in the Alley below Commercial Bank.

Don't Forget the Name.

N. B.—Finding that many mistakes have occurred in supposing that E. R. STOKES, *Book-Binder*, and ROB'T. M. STOKES, Publisher of *The Farmer and Planter*, to be one and the same person, I would request my friends to remember that my office is a few doors below the Commercial Bank, and all letters connected with *The Farmer and Planter* office should be addressed to

ROB'T. M. STOKES.

June, 1860.

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TRANSACTIONS OF THE STATE SOCIETY OF 1858.

The transactions of the State Agricultural Society, of 1858, are now ready for delivery. Each Life Member of the Society is entitled to a copy, which can be obtained by calling at the office of the *Farmer and Planter*, or by informing the publisher of the *Farmer and Planter* where to send them.

WE MAY MAKE MISTAKES.

It is probable that within the past two months we have made some mistakes of omission or commission, in sending out our journal. If any such errors have occurred, please inform us, and we will rectify them.

FAMILY AND PLANTATION SUPPLIES.

30,000 POUNDS COUNTRY CURED BACON,

400 BAGS FIRST AND SECOND QUALITY FLOUR.

75 BARRELS COFFEE AND CRUSHED SUGARS,

100 BAGS RIO, LAGUIRA, AND JAVA COFFEES, 90 PACKAGES NO. 1, 2 AND 3 MACKEREL AND SALMON, 60 BASKETS HEIDSEICK AND DRUMMOND CHAMPAGNE.

ALSO

A LARGE STOCK OF STRICTLY CHOICE WINES, BRANDY, WHISKEYS, &c., PICKLES, PRESERVES, SAUCES, KETCHUPS, SARDINES, OYSTERS, SALMON, LOBSTER, SEGARS AND TOBACCO.

 For sale Low for Cash, or Short Time to Known Punctual Customers. 

E. HOPE.

BRAHMIN CATTLE FOR SALE.

FULL-BLOOD and Grade Calves, Bulls and Heifers, of the celebrated

Brahmin Cattle,

for sale. Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON.

April, 860

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FULL-BLOODED, fifteen-sixteenths, seven-eights, and three-quarter Grade

CASHMERE GOATS,

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FRANK HAMPTON.

April, 1860

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PREMIUM LIST

OF THE

FARMER AND PLANTER.

GREAT INDUCEMENTS TO GETTERS UP OF CLUBS.

VALUABLE PREMIUMS!

WHO WILL GET THEM?

THROUGH the kindness of many friends of the "FARMER AND PLANTER," I am enabled to offer the following handsome Premiums for Subscriptions for this year:

For the largest list of subscribers, by one person, not less than ONE HUNDRED—	A SILVER PITCHER, WORTH \$50.00
For the largest list, not less than FIFTY, by one person—	SILVER PITCHER, WORTH \$25.00
For the largest list, not less than TWENTY-FIVE, by one person—	SILVER GOBLET, WORTH \$12.00
For the largest list, not less than FIFTEEN, by one person—	SILVER CUP, WORTH \$8.00
For the largest list, not less than TEN, by one person—	SILVER CUP, WORTH \$5.00

Should there be a tie by two or three for the \$5 Premium, each one so tieing will be presented with a \$5 Premium.

Competitors should send in their subscriptions as fast as they can procure five names, so that the journal may be mailed early.

In every case the Cash must accompany the names, or they will not be entered on the book.

Persons intending to compete for any of the Premiums will please mention it when they send the first list.

The above Premiums will be opened for competition until the first day of June next, when the lists then received will be submitted to a disinterested Committee who will decide upon the claims of each competitor, and award the Premiums to the successful ones.

Any or all of the above Premiums will be paid in Cash, if preferred by the successful competitors.

Persons obtaining subscribers in the City and District of Charleston, will please make their returns to Mr. JOSEPH WALKER, 120 Meeting Street, Charleston.

**R. M. STOKES,
Publisher of Farmer and Planter.**

I return my thanks to the papers of the State who have so generously noticed the February issue of the *Farmer and Planter*, and would respectfully ask them to notice the above offers of premiums.

R. M. S.

ENCOURAGE SOUTHERN ENTERPRISE.

SUPERIOR COTTON AND WOOLEN GOODS.

COLUMBIA MILLS.

THE subscribers, in view of the GREATLY INCREASING demand for goods of Southern manufacture, have added very largely to the machinery in their extensive COTTON and WOOLEN MILL, and are now prepared to furnish

COTTON OSNABURGS, STRIPED OSNABURGS, COTTON YARN, WOOLEN KERSEYS OR JEANS,

all of which they WARRANT to be of SUPERIOR quality.

We also continue to manufacture Wool into Cloth, at very low rates, furnishing everything except the wool, and charging but 12½ cents per yard for Plain Cloth, and 16 cents per yard for Twills; or we will work it up for one-half of the cloth it makes. This arrangement enables planters raising wool to obtain a superior article of NEGRO CLOTH, at a very small cost. Planters or others, sending us wool to work up, can send it either *clean or dirty*; if sent dirty, one-half cent per yard extra will be charged for expense of washing it. We would prefer the wool, however, to be sent clean, as the yield will be more satisfactory—dirty wool loses from 25 to 50 per cent. in cleaning. Burrs are not objectionable, as they are removed by machinery. The NAME OF THE OWNER SHOULD BE MARKED DISTINCTLY ON EVERY PACKAGE SENT. This must be strictly attended to. We will also pay a fair CASH PRICE for any wool sent us. We solicit the patronage of the South, and pledge ourselves to give satisfaction to all of our customers.

Address

JAMES G. GIBBES & Co.,

Columbia, S. C.

May, 1860

5—2t

CLOTHING! CLOTHING!

E. FULLINGS & CO.

ARE NOW OFFERING, AT THE LOWEST CASH RATES, ONE OF THE BEST ASSORTED STOCKS OF SUMMER

READY-MADE CLOTHING

They have ever manufactured for the Southern Market. They have, in connection with Clothing, a very large Stock of MEN'S FURNISHING GOODS: also, Men's and Boys'

STRAW AND FELT HATS.

Planters, give them a call. Their Store is three doors South of the Commercial Bauk, Main-st., Columbia, S. C.
July, 1859

7—tf

THOMAS LEARMONT,
FLORIST,
Columbia, S. C.,

Cultivates, for Sale,

EVERGREEN TREES, SHRUBS AND ROSES,
GERANIUMS, GREEN-HOUSE PLANTS,
CAMILLIAS, VERBENAS,

PETUNIAS, DAHLIAS, CRYSANTHEMUMS.

Nov.—59

11—tf.

1859--60.

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IMPROVED NORTH-DEVON CATTLE.

All my Breeding Stock were purchased from Col. A. G. SUMMER, who bred the first Premium Bull and Cow exhibited at the South Carolina State Fair, 1858, and are

THOROUGH-BRED HERD-BOOK DEVONS,

of the BEST MILKING FAMILIES, carefully selected by him from the Herds of GEO. PATTERSON, Md., L. G. MORRIS, N. Y., and RICHARD PETERS, Ga., as well as strains from recent importations. In addition to these, I have, at a heavy cost, incorporated into my herd, Mr. JAS. T. LATTA'S imported Devons, bred by Mr. GEO. TURNER, of "Barton," near Exeter, England, consisting of Imported "CHASSEUR," a first-class 2 year old Bull; "CURLY," an equally superior Heifer. These cattle will enable me to furnish new strains, and the best crosses, to all the Devon Herds in the South.

I have now for sale the following BULL CALVES, at prices named:

No. 1.—Bull Calf, "YULEE," out of "Charity," by W. Williams Sykes, out of an old English-bred Devon Cow, (a great milker); Sire Atlas, &c.; calved December 1st, 1858: Price \$150 00.

No. 2.—Bull Calf "LOD," out of "Raehel," by Col. Williams' "Red Comet," dam Impt. Red Lady, bred by the Earl of Leicester; Sire Atlas; calved June 10th, 1859: Price \$250 00.

N. B.—Red Lady, at 18 years of age, was a great milker. Rachel took the 1st prize, as a 2 year old heifer, at the South Carolina State Fair, 1858, and is a superb milker. I regard this heifer and her calf, the best Devon stock in America, for the Dairy.

No. 3.—Bull Calf "FORDHAM," out of Princess V., by Impt. Frank Quarterly, out of Impt. Princess; Sire Atlas; calved July 30, 1859: Price \$200 00.

N. B.—Princess V., was the 2d prize 2 year old heifer at the South Carolina State Fair, 1858.

ENGAGEMENTS for Bull Calves, to be dropped in 1860, will be registered, and applicants furnished in the order of reception.

The beautiful 1st premium Bull of the State Fair Exhibition, 1858, was bred from this herd of cattle, and has since been sold by Col. Lod Hill for \$300 00

After an expensive experience of 20 years with all other improved breeds of cattle, I rely upon the Improved North-Devons for all plantation purposes, being, in the main, good milkers, thrifty, hardy, and subsisting on scanty pasturage, better than natives. The same is claimed for the Brahmin grades, but with this breed I have no experience.

SOUTH-DOWN SHEEP.

I have heretofore imported fine specimens from the celebrated stock of JONAS WEBB; and this season I have again imported Five magnificent EWES, which will bear comparison with the best. I will dispose of the Buek Lambs of these and the 1st Premium Ewes: Price \$50 00 each.

COTSWOLD SHEEP.

I have imported a select Flock of these—the best of the long-wooled Sheep. They are large, fine feeders, fatten well, and furnish immense fleeces of long wool, well suited to the manufacture of strong, coarse, woolen goods. The buck lambs of 8 Ewes will be furnished the Summer of 1860: Price \$50 00 each. Half-bred Buck lambs out of fine Bakewell Ewes: Price \$25 00 each.

ESSEX SWINE.

A fine breed of medium-sized black Hogs, and being very free from mange, are admirably adapted to lot-breeding. They make a good cross for all other breeds, and, arriving at early maturity, fatten readily.

I have purchased from JAS. T. LATTA, Esq., his imported Essex Stock—these being the finest and largest of the breed in this country. Price of choice pigs, carefully selected, from my Imported Boar and Sows, at 8 weeks old, \$40 00 per pair. From other fine Sows, by Imported Boar "Pendleton," \$25 00 per pair.

Now on HAND, 2 Litters of the latter stock; also, 1 Litter of a fine Sow, bred by myself.

CHESTER COUNTY SWINE.

A large White breed, thrifty and prolific, very popular in Pennsylvania and Maryland, and fine plantation stock-hogs. They grow to large size, and fatten readily from fifteen to eighteen months old: Price \$25 00 per pair. From the great demand for this breed, and the misfortune of losing two of my sows, I have been unable to supply all applicants, but will do so this Winter.

October, 1859

10—tf

WM. SUMMER, Pomaria, S. C.

I. D. MORDECAI, Agent,
 NO. 134 MAIN STREET,
 NEXT DOOR TO JOHN MCKENZIE'S CONFECTIONARY STORE,
 COLUMBIA, S. C.,
 IS CONSTANTLY RECEIVING AND HAS CONSTANTLY ON HAND,
SEGARS, TOBACCO, &c.

CHOICE SPANISH SEGARS, SNUFF AND SNUFF-BOXES FINE GERMAN SEGARS,
 SEGAR CASES, BEST CHEWING TOBACCO, GENUINE MEERSHAUM PIPES,
 BEST SMOKING TOBACCO, SEGAR-STEMS, &c.

BRANDIES, WINES, &c.

COGNAC BRANDY,
 SUPERIOR BLACKBERRY AND CHERRY BRANDY,
 HOLLAND GIN,
 JAMAICA RUM,
 BEST BRANDS CHAMPAGNE WINE,
 GERMAN, SCOTCH AND IRISH WHISKEY,
 OLD MADEIRA, SHERRY AND PORT WINE,
 CHOICE RYE WHISKEY,
 SUPERIOR CLARET AND HOCK WINE,
 ASSORTED GENUINE CORDIALS,
PORTER, ALE AND LAGER BEER IN JUGS.

He is, also, Agent of the **BALTIMORE INK COMPANY**, and the **PHILADELPHIA STEAM PAPER-BAG MANUFACTORY**.

Persons wishing to purchase any of the articles above enumerated, will please call and examine the Stock. They will be sold, at the *smallest profits*, **FOR CASH**.

ALLEN & DIAL,
 COLUMBIA, S. C.,

Direct Importers and Wholesale and Retail Dealers in
ENGLISH AND AMERICAN HARDWARE & CUTLERY,
IRON, STEEL, NAILS,

MILL STONES, MILL IRONS,
 BOLTING CLOTHS, STOCK KETTLES,
INDIA RUBBER AND LEATHER BELTING,
CARPENTERS', BLACKSMITHS' AND TANNERS' TOOLS.
 AGRICULTURAL AND GARDEN IMPLEMENTS, in great variety.

FENDERS, ANDIRONS. SHOVELS AND TONGS,
 And many other articles in the Housekeeping line.

Lime, Cement, Plaster, Paints, Oils,
FRENCH & AMERICAN WINDOW GLASS,
 DOUBLE AND SINGLE BARREL GUNS, PISTOLS,

SHOT BELTS, POWDER FLASKS, POWDER, SHOT, &c.
 All of which are offered for sale at prices that cannot fail to give satisfaction.

JOHN M. ALLEN.

JOHN C. DIAL

IMPROVED ENGLISH GRASS-HOG.

This is a hardy, prolific breed, small-boned, short-legged, long, and broad bodied, lop-eared hogs; color sandy, spotted with black and white: said to subsist well on grass and clover, without grain, during the Summer, and to fatten kindly; attaining, with good feed, from 200 to 250 lb. net, at 9 months old, and from 350 to 400 lb., nett, at 21 months; whilst older hogs have reached 550 to 600 lbs. I have now on the way, 1 Boar and 4 Sows, of this breed; and, when tested, if found suited to the South, their produce will be offered for sale at reasonable prices.

In answer to frequent enquiries as to my prices for Grade Calves, I reiterate that I never sell Grades of any of my stock; nor have I offered any, except crosses of the Cotswold and Leicester Sheep, which, being a union of two long-wool breeds I deem valuable to the South. All animals, before they leave my farm, shall be in good condition, and honestly selected; and, if properly cared for and fed, will give satisfaction to the purchasers.

Pigs caged, and other stock haltered, and delivered at Pomaria Depot, Greenville and Columbia Railroad, with proper food for the journey; after which they will be at the risk of the purchaser.

TERMS:—Cash for all sums under \$100; over that sum, a credit of four months, for acceptable Note or Factors acceptances.

October, 1859

10—tf

DAHLIAS AND CRYSANthemums.

A SUPERB collection of the finest French Belgian and English Prize varieties can be furnished.—Packed so as to go with safety to any distance. These have been procured at great trouble and expense, and are offered at a reasonable rate. Price from \$8 to \$10 per dozen. See descriptive list in May number of *Farmer and Planter*.

Crysanthemums.

The finest Pompon varieties—beautiful ornaments in autumn. Price \$2.50 per dozen.

THE DAHLIAS

Can be sent out from this time until the 1st of July, and will bloom beautifully until frost.

May, 1860

5—tf

WM. SUMMER,
Columbia, S. C.

Professor Mapes' Nitrogenized

SUPER-PHOSPHATE OF LIME.

FOR sale in bags of 160 pounds each, at the manufacturer's price, with the actual expense of freight, &c., only added.

The subscribers having been appointed Sole Agents, in this city, for the sale of the above celebrated fertilizer, will furnish it at manufacturer's prices.

Per ton of 2,000 pounds, \$50 net cash.

Expenses of freight, &c., \$3.

Delivered in Charleston at \$53 per ton, net cash.

Per bag of 160 pounds, \$4.25 net cash.

Pamphlets, giving full particulars for its use, will be sent on application.

GRAVELEY & PRINGLE,
No. 44 East Bay, South of the Post Office,
Charleston, S. C.

Plows, Corn-shellers, Hay-cutters, Grant's Patent Fan Mills, Little Giant Corn and Cob Mills, Excelsior Burr Stone Mills, and all kinds of Agricultural Implements, for sale low.

—ALSO—

A large assortment of fine ENGLISH GUNS, made expressly to order, with Powder Flasks, Shot Bags, &c., in great variety, and a general stock of English and American HARDWARE, including best Cut Nails.

Feb.—1860 2—tf

JOHN H. HUGHES,
No. 53 RICHARDSON STREET,
Columbia, S. C.,
DEALER IN

MARBLE AND GRANITE
OBELISKS, MONUMENTS,
HEAD-STONES, &c.

FOR SALE AT THE LOWEST PRICES.

W. W. PURSE, Agt.

SUPER-PHOSPHATE OF LIME,

MANUFACTURED BY

W. WHITELOCK & Co.,
Baltimore, Md.

HAVING taken the agency of the above valuable FERTILIZER, we take pleasure in recommending it to our Planters, with the fullest confidence that it will give entire satisfaction. The universal success which has attended its use in the Southern States for several years, together with the analyses of Charles Bickell, P. H. D., and of Prof. Shepard, of Charleston, S. C., entitles it to the highest consideration. A supply constantly on hand. Pamphlets, with full directions for its use, &c., will be forwarded, on application.

MULLER & SENN, Sole Agents,
Columbia, S. C.

Feb.—1860

2—tf.

YORKVILLE FEMALE COLLEGE.

THE 13th term of this Institution will begin on the 18th inst.

EXPERIENCED AND EFFICIENT TEACHERS

Will be employed in all the departments—Primary, Collegiate and Ornamental. The rates of Tuition are lower than in most of our first class schools.

GOOD BOARD can be obtained at \$10 per month, exclusive of Lights. The UNDERSIGNED will receive FORTY young ladies into his house, which is adjoining the College lot.

CIRCULARS, giving full particulars, will be sent to those addressing

J. MONROE ANDERSON,
President.

Feb.—1860

2—tf

W. H. YOUNG & CO.,

WHOLESALE AND RETAIL

BOOT, SHOE & LEATHER STORE,
COLUMBIA, S. C.,

ALWAYS on hand a large stock of Gent's Fine Boots, Shoes and Gaiters; also, a full assortment of Ladies' Gaiters, Slippers and Bootees, Misses', Children's and Boys' Shoes; Plantation Boots and Brogans.

With a large Manufactory, we are prepared to make to order any style of work in our line.

Also, a full stock of

LEATHER,

Consisting of Fine French Calf-Skins, American Calf-Skins, Baltimore Oak Sole, Hemlock Sole and Upper Leather, Fine and Common Lining Skins, Binding Skins, &c., with a full supply of Shoe Findings.

All orders from the country promptly attended to.

April, 1859.

4—tf

FAMILY AND PLANTATION SUPPLIES.

30,000 POUNDS COUNTRY CURED BACON,

400 BAGS FIRST AND SECOND QUALITY FLOUR.

75 BARRELS COFFEE AND CRUSHED SUGARS,

100 BAGS RIO, LAGUIRA, AND JAVA COFFEES, 90 PACKAGES NO. 1, 2 AND 3 MACKEREL AND SALMON, 60 BASKETS HEIDSEICK AND DRUMMOND CHAMPAGNE.

ALSO

A LARGE STOCK OF STRICTLY CHOICE WINES, BRANDY, WHISKEYS, &c., PICKLES, PRESERVES, SAUCES, KETCHUPS, SARDINES, OYSTERS, SALMON, LOBSTER, SEGARS AND TOBACCO.

For sale Low for Cash, or Short Time to Known Punctual Customers.

E. HOPE.

ALLEN & DIAL, COLUMBIA, S. C.,

Direct Importers and Wholesale and Retail Dealers in

ENGLISH AND AMERICAN HARDWARE & CUTLERY,
IRON, STEEL, NAILS,

MILL STONES, MILL IRONS,

BOLTING CLOTHS, STOCK KETTLES,

INDIA RUBBER AND LEATHER BELTING,
CARPENTERS', BLACKSMITHS' AND TANNERS' TOOLS.

AGRICULTURAL AND GARDEN IMPLEMENTS, in great variety.

FENDERS, ANDIRONS, SHOVELS AND TONGS,

And many other articles in the Housekeeping line.

Lime, Cement, Plaster, Paints, Oils,
FRENCH & AMERICAN WINDOW GLASS,

DOUBLE AND SINGLE BARREL GUNS, PISTOLS,

SHOT BELTS, POWDER FLASKS, POWDER, SHOT, &c.

All of which are offered for sale at prices that cannot fail to give satisfaction.

JOHN M. ALLEN.

February, 1860

2—3t

JOHN C. DIAL.

BRAHMIN CATTLE FOR SALE.

FULL-BLOOD and Grade Calves, Bulls and Heifers, of the celebrated

Brahmin Cattle,

for sale, Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON,

April, 1860

4—tf

CASHMERE GOATS.

FULL-BLOODED, fifteen-sixteenths, seven-eights, and three-quarter Grade

CASHMERE GOATS,

for sale. Enquire of R. M. STOKES, at the office of the *Farmer and Planter*, or to

FRANK HAMPTON,

April, 1860

4—tf

PREMIUM LIST
OF THE
FARMER AND PLANTER.

GREAT INDUCEMENTS
TO GETTERS UP OF CLUBS.

VALUABLE PREMIUMS!

WHO WILL GET THEM?

THROUGH the kindness of many friends of the "FARMER AND PLANTER," I am enabled to offer the following handsome Premiums for Subscriptions for this year:

For the largest list of subscribers, by one person, not less than ONE HUNDRED—	A SILVER PITCHER, WORTH \$50.00
For the largest list, not less than FIFTY, by one person—	SILVER PITCHER, WORTH \$25.00
For the largest list, not less than TWENTY-FIVE, by one person—	SILVER GOBLET, WORTH \$12.00
For the largest list, not less than FIFTEEN, by one person—	SILVER CUP, WORTH \$8.00
For the largest list, not less than TEN, by one person—	SILVER CUP, WORTH \$5.00

Should there be a tie by two or three for the \$5 Premium, each one so tieing will be presented with a \$5 Premium.

Competitors should send in their subscriptions as fast as they can procure five names, so that the journal may be mailed early.

In every case the Cash must accompany the names, or they will not be entered on the book.

Persons intending to compete for any of the Premiums will please mention it when they send the first list.

The above Premiums will be opened for competition until the first day of June next, when the lists then received will be submitted to a disinterested Committee who will decide upon the claims of each competitor, and award the Premiums to the successful ones.

Any or all of the above Premiums will be paid in Cash, if preferred by the successful competitors.

Persons obtaining subscribers in the City and District of Charleston, will please make their returns to Mr. JOSEPH WALKER, 120 Meeting Street, Charleston.

**R. M. STOKES,
Publisher of Farmer and Planter.**

I return my thanks to the papers of the State who have so generously noticed the February issue of the *Farmer and Planter*, and would respectfully ask them to notice the above offers of premiums.

R. M. S.